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the degree of PhD in the Faculty of Humanities at
Manchester Business School.**

Performance Management in Primary Care

How can the Principal-Agent Theoretical Framework be used to attain a better
understanding of performance management in primary care?

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Abstract

Lisa Rogan; University of Manchester; PhD; 9 August 2013

How Can the Principal-Agent Theoretical Framework be used to attain a better understanding of performance management in primary care?

Principal-Agent Theory has been used by researchers to understand relationships among different professional groups and explain contractual arrangements and performance management between organisations. Use of principal-agent theory in research within primary care is limited. This study uses the principal-agent theoretical framework to attain a better understanding of performance management in primary care. The relationship between managers and primary care clinicians is explored. The study uses the main theoretical assumptions of *information asymmetry* and *goal alignment* to explain the findings. Case study methodology was used to explore the research question. Purposive sampling techniques using the following datasets were used to select participants: practice size; percentage South Asian population; levels of deprivation; and relative performance on selected national productivity performance indicators. Managers were selected based on their corporate responsibility for organisational performance or role in performance management within the organisation. Twenty six formal recorded interviews were carried out with various directors, managers and clinicians across NHS East Lancashire and NHS North West. Interviews were transcribed and organised using NVIVO 8 software and analysed using matrix analysis techniques.

There is confusion between *performance measurement* and *performance management*. The terms are often used interchangeably. The NHS tends to focus on things that are easy to measure at the risk of omitting important aspects of care that are more difficult to capture. Soft performance intelligence such as: training, multidisciplinary teamwork, communication and shared vision are just as important as tangible metrics. Three primary care performance management systems emerged from the findings: The Quality and Outcomes Framework (QOF), the Practice Development Framework (PDF) and the Better Care Better Value (BCBV) Productivity Performance Framework. Performance indicators do not always reflect quality outcomes. This can lead to poorer outcomes for patients especially if dependent on incentives.

The study addresses the research question through analysis of the following themes: Understanding performance management; Use of performance management systems; and Barriers to performance management in primary care. A common understanding of performance management is required across all stakeholders. Clear, strategic direction and consistent interpretation of organisational objectives at all levels is essential to achieve goal alignment. Soft intelligence and qualitative measures need to be considered as well as tangible metrics. Clinical engagement and ownership are key factors to achieving goal alignment. Trust between principal and agent affects the degree to which information asymmetry is overcome. Appropriate use of incentives, good communication and strategies to overcome the problem of *information asymmetry* and address '*professional superiority*' improves goal alignment. Achieving the right balance between accountability and clinical autonomy is important to ensure governance and financial balance without stifling innovation. Goal alignment depends on quality and accuracy of information and robust targets to avoid misunderstanding and misinterpretation of information and inadvertent use of incentives. Principal-agent theory suggests goal alignment is achieved by applying the underlying assumptions of the theoretical framework. In complex systems like the English NHS, it is likely that only partial goal alignment will be achieved. The degree of achievement depends on the number and level of alignment of individual factors.

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Preface

The inspiration for this piece of research emerged from findings of a former study using analysis of quantitative data. While the data analysis generated lots of discussion with relevant stakeholders, conclusions emerging from those discussions created more questions than provided answers. This led the researcher to recognise a need for richer and more detailed information to help explain and understand the conclusions. This spurred the researcher to undertake a qualitative research study that would adequately provide the rich data required to substantiate the conclusions.

The research began back in 2007 in the midst of an economy of sustained growth under a Labour Government when banks were lending, employment was high and Primary Care Trusts (PCTs) were the accountable bodies for commissioning NHS services. No-one could envisage the upheaval yet to come.

In September 2008, following a period of sustained growth; the UK was just one among many Western economies that was hit by a global recession. Growth ceased practically overnight and companies laid off employees by the thousands.

In May 2010, just as the formal interviews were about to commence, the Conservatives and Liberal Democrats formed the first Coalition Government since 1945. The White Paper: Equity and Excellence – Liberating the NHS was published in the following July which outlined fundamental NHS reforms. These involved devolution of commissioning budgets to GPs and replacement of PCTs with much smaller clinically led commissioning groups (CCGs). These reforms resulted in significant national and organisational change.

Formal interviews commenced in 2010 amidst this period of national NHS reform. The following three years saw the demise of PCTs and the loss of valuable knowledge and skills through redundancies and redistribution of staff. The carving up and re-delegation of responsibilities to various organisations including: Clinical Commissioning Groups, NHS England, Public Health England and Commissioning Support Units highlighted the difficulties of managing such a complex system at a time when cuts in management costs remained a national priority.

A challenge for any researcher is to remain motivated throughout the period of study, particularly for part time students studying over a long period of time. This study had the additional challenge of ensuring the research remained relevant at the end of the six year period despite the global and national economic crises, the political agenda and NHS reforms.

Despite changes in organisations and structures, performance management continues to be important for purposes of assurance and accountability. This is possibly even more pertinent now to CCGs than it was for PCTs when study commenced in 2007.

Chapter 1

Introduction

1.0 Background

Performance management has become a major feature of managing health care to provide assurance to commissioning organisations with respect to greater accountability, safety, efficiency and quality.

This research commenced in 2007 in the midst of an economy of sustained growth under a Labour Government; employment was high and Primary Care Trusts (PCTs) were the accountable bodies for commissioning NHS services. In September 2008, following a period of sustained growth the UK was just one among many western economies that was hit by a global recession.

In May 2010, the Conservatives and Liberal Democrats formed the first coalition government since 1945 and The White Paper: Equity and Excellence – Liberating the NHS (DH 2010) was published in the following July which outlined fundamental NHS reforms involving the devolution of commissioning budgets to GPs and the replacement of PCTs with much smaller clinically led commissioning groups (CCGs).

The following three years saw the demise of PCTs. The carving up of responsibilities across Clinical Commissioning Groups, NHS England, Public Health England and Commissioning Support Units highlighted the difficulties of managing such a complex system at a time when cuts in management costs remained a national priority.

Despite changes in organisations and structures, performance management through commissioners of health care continues to be an important element of assurance and

accountability and is perhaps even more pertinent to primary care now than it was when this study commenced in 2007.

This introductory chapter provides an overview of the thesis starting with an explanation of the theoretical framework and use of performance management systems. The following section brings the two aspects together by providing an outline of the research question and applying principal-agent theory to performance management. Section 1.4 provides a background to the participating organisations and period of transition. A timeline of events with respect to dates, local milestones, national events, organisational issues and their impact on the research is provided. Section 1.5 provides an outline of each chapter.

1.1 Use of Performance Management Systems

In the private sector, organisations are under pressure to demonstrate quality and value of service through improved customer focus, flexibility and innovation as well as cost (Neely 1999). Over the last decade there has been a greater emphasis on improving the effectiveness of public services through use of private sector principles (Radnor and McGuire 2004).

Where balanced performance measurement systems as the approach for management have been adopted by organisations, performance tends to be better than those where such systems have not been used (Lingle and Schiemann 1996). Similarly, organisations who managed to integrate evaluation activities into the daily operations and strategic management or quality assurance processes were considered to be more successful compared with similar organisations that didn't (Carmen and Fredericks 2010). Using the right approach for performance management can enable organisations to identify successes as well as areas for improvement.

The role of performance measurement and clinical indicators has changed from being a minor component in the management of health care to one where the demands for greater accountability, safety, efficiency, and quality have accentuated the role of measurement and reporting. Despite the fact that performance measures are now widely used within the public sector there remains a lack of evidence over their usefulness and whether organisations actually achieve the goals set by policy-makers (Propper 2003). Despite the drive to continually develop more performance indicators, there is little evidence that they have had a

positive impact on decision making, improved health service delivery, or health outcomes (Adair et al 2003) and have not convincingly been able to demonstrate their overall impact or value for money (Sheldon 2005). Performance management is integral to strategic planning, enabling managers to make the necessary changes required over time. A balanced performance management system should be aligned with strategic focus and reflect the corporate objectives of the organisation. However, in complex organisations such as the NHS, it is likely that multiple performance management systems (PMSs) will be required to achieve successful strategic control. Interdependencies with other organisations, healthcare professionals of varying disciplines and patients are just some examples of how different principal-agent relationships can lead to a complex map of information asymmetry and potentially conflicting goals.

Although performance assessment frameworks are the quantitative instruments used to monitor progress of health care, many of these are variable in quality and coverage is often not comprehensive or adequately balanced (Smith 2002). Performing well should mean improving quality, not simply productivity (Dixon 2000). Strict reliance on measuring quantitative data contained in administrative datasets will only measure those elements of care that are consistently and reliably recorded. It is unlikely that data collected for administrative or financial purposes will meet the requirements of data to be used for quality assessment (Campbell et al 2000). As well as the more traditional criteria of performance such as: adherence to strict budgets, maximisation of patient through-put, and reduction of waiting times for elective surgery, a much broader view of what constitutes health system performance should be considered. This should include patient satisfaction and clinical quality. A challenge to implementing this policy is to integrate the top-down instruments of performance management (standards, priorities and accountability) with a system of clinical networks (professional concern with clinical quality, patient focus, peer review and continuous improvement) (Smith 2002). Principal-agent theory can be used to understand these relationships between managers and clinicians who can have conflicting views of what constitutes autonomy and accountability.

While there are many reasons to support performance management there are a number of counter-arguments that must also be considered such as: distortion, exclusion, misinterpretation and manipulation of data along with high transaction costs and employee

demoralisation (Talbot 2005). Poor data quality and comparability, differing priorities or perspectives among stakeholders, insufficient expertise and, insufficient linkage with subsequent action (Sheldon 2005) are all further examples of how performance management can result in unintended consequences. The Mid Staffordshire NHS Foundation Trust investigation is an example of where unintended consequences for patients resulted, despite the use of widespread performance management systems (Francis 2013). Inappropriate behaviour and unintended consequences can be explained using principal-agent theory where achievement of goal alignment is prevented due to conflicting interests and objectives. This is explored in chapters 2, 4 and 5 in sections 2.6, 4.5 and 5.4 respectively.

1.2 Principal-Agent Theory

Principal-agent theory is described as a problem where one party (the principal) needs another party (the agent) to deliver the first part's objectives, but the principal cannot fully control or even observe the activity of the agent (NAO 2008). This is the theoretical framework used in the study to provide a better understanding of performance management in primary care. Use of the principal-agent theoretical framework has been used successfully in health services management to understand various relationships across professional groups and within healthcare organisations. Despite this, the academic literature suggests limited use of this theory in primary care. Successful use of principal-agent theory to explore relationships between different professional groups and organisations is one reason for selecting this theory in this study. A second reason is the dearth in literature on use of this theoretical framework to explain findings between different professional groups and organisations in a primary care setting. This is described in more detail the methodology, section 3.6.2.

Principal-agent theory has been described as:

“a problem whereby one party (the employer or ‘principal’) needs another party (the employee, contractor or ‘agent’) to act to deliver the first party’s objectives, but the principal cannot fully control (or even observe) the activity of the agent. The central dilemma being that the contractor or agent has an informational advantage and different objectives to the employer or principal. The agent’s objectives are often to

maximise its own profits, rather than to produce the maximum quality or quantity of the good the principal desires.

(NAO; 2008; pp 6)

The principal-agent problem can be found in contractual agreements that are written amidst a world of information asymmetry, uncertainty and risk where principals can never hope to completely check an agent's performance. This relationship may arise in the public sector between different bodies within the chain of delivery. This can be applied between organisations such as departments within governments acting as the principals and provider organisations acting as agents or within an organisation where managers might act as the principals and employees as the agents (NAO 2008). An assumption is that where multiple stakeholders (principals) exist such as in the public sector, priorities may not be fully aligned giving rise to potentially conflicting objectives. In contrast to the private sector where generally the owners' interests are focused on the single objective of value maximization (Dixit 2002), public sector bodies are often expected to simultaneously achieve cost-effectiveness as well as equity objectives.

1.3 The Research Question

The growing emphasis on *performance management* in primary care highlights the importance of understanding and exploring this concept. Principal-agent theory is a theoretical framework that explains the relationship between commissioners (principals) of health care and clinicians or GPs (agents) as providers of health care.

The research question is:

“How can the Principal-Agent Theoretical Framework be used to attain a better understanding of performance management in primary care?”

To fully answer the question, it has been broken down into three related sub-questions:

a. Understanding of performance management in primary care:

How can the principal-agent theoretical framework be used to explain and understand the perceptions of performance management from the perspective of various professionals.

b. Use of performance management systems in primary care:

How can the principal-agent theoretical framework be used to explain the findings from use of performance management systems in primary care?

c. Barriers to performance management in primary care:

How can the principal-agent theoretical framework be used to explain the barriers to improving performance in primary care.

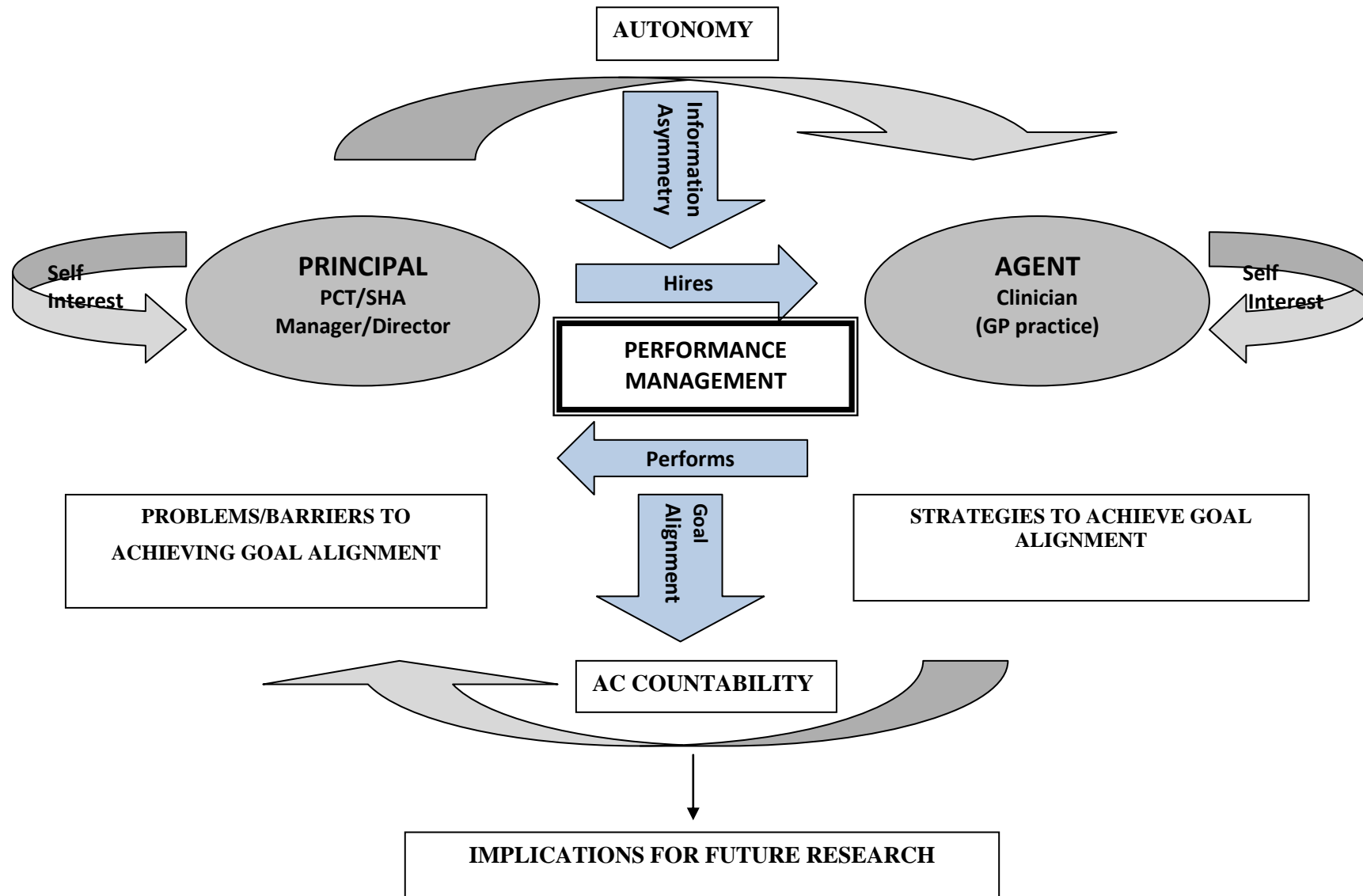
The most effective way to explore the research question was considered to be the use of an inductive approach through use of qualitative research techniques that provides the detailed, rich information required.

1.3.1 Applying Principal-Agent Theory

The principal-agent theoretical framework is used to attain a better understanding of the importance, use and problems associated with performance management by managers and clinicians in the English NHS from a primary care perspective. An outline of how the theory is applied to the concept being studied is provided in figure 1.0.

The shaded areas represent the principal-agent theoretical framework. The boxes represent over-arching concepts and themes from the academic literature and empirical findings.

Figure 1.0: Principle-Agent Theoretical Framework and its Application to Performance Management in Primary Care



1.4 Participating Organisations

The statutory organisations that participated in the study were: North West Strategic Health Authority (NHS NW) and East Lancashire Primary Care Trust (NHS EL). The following sections provide a brief overview of each of the organisations with regard to their roles and responsibilities.

1.4.1 North West Strategic Health Authority (SHA)

NHS North West or the North West Strategic Health Authority (SHA) was at the time of the study the body responsible for ensuring that NHS organisations across the North West of England performed effectively. As the leader of the NHS in the North West, the organisation was responsible for agreeing the organisation's strategy and monitoring performance against financial, quality and other targets. Improving public health and reducing health inequalities were also important strategic objectives.

NW SHA had overall responsibility for the performance of 24 primary care trusts (PCTs), 23 acute trusts, eight mental health trusts, seven specialist trusts (including children's cancer and learning disability) and the North West Ambulance Service. They had a role to play in helping trusts achieve foundation status, supported acute trusts and PCTs to improve performance, make their services more accessible and develop the skills of their workforces. On 3 October, 2011 the three strategic health authorities in the North of England: NHS North East, NHS North West and NHS Yorkshire and the Humber were placed under a single management framework and worked together as NHS North of England.

1.4.2 East Lancashire Primary Care Trust (PCT)

At the time of the study PCTs were the local NHS commissioners who had ultimate accountability for the commissioning of health services within the local area and for ensuring that the local health system worked towards improvement of health and well-being across the population. PCTs had responsibility for identifying current and future local health needs, working in partnership with clinicians, public and other stakeholders and had responsibility for seeking views and input from clinicians and across the community to inform the development of their strategic priorities for health care in the local area.

PCTs were encouraged to work with clinicians in reviewing services or designing new service models and had responsibility to ensure that the right infrastructure was in place to enable this to happen. PCTs were also encouraged to provide practices (known as practice based commissioning (PBC) at the time) with *indicative budgets*. They were responsible for delegating responsibility for managing the budget and taking investment decisions for some areas of care. This became known as *earned autonomy*. PCTs had responsibility of providing PBCs with comprehensive and timely information to help them make informed commissioning decisions and recommendations for re-designing services. They were also responsible for providing management support for effective practice-based commissioning by investing in infrastructure, training & development.

East Lancashire PCT was responsible for commissioning healthcare services for a population of 366,000 with a total budget of £715 million. The PCT consisted of five localities: Burnley, Pendle, Rossendale, Hyndburn and Ribble Valley each with different demographic profiles and different health care needs. In June 2007 the East Lancashire Professional Executive Committee (PEC) consisting of clinicians and PCT directors supported a research proposal to explore and understand the role of performance management from a primary care perspective.

A structured approach was used to select GP practices to participate using specific datasets on: Practice size and infrastructure, level of deprivation and ethnicity and relative performance on the BCBV productivity performance indicators. The approach is described in more detail in section 3.7.3 of the methodology. Directors were selected according to their corporate responsibility for performance management of primary care. Senior managers were selected according to their role in managing primary care performance. In total, 26 interviews were carried out across various general practices in East Lancashire, East Lancashire PCT and North West SHA. These constituted: 10 GPs, 2 practice managers, 6 PCT executive directors, 1 non-executive director, 3 senior managers and 4 SHA directors. A more detailed description of the approach used to select participants can be found in section 3.7.3.

1.4.3 Timeline of Events

A timeline of the events and incidents from initiation of the study to date of submission are summarised in table 1.0. This captures the challenges that emerged as the study progressed over the six years.

Table 1.0: Timeline of Events

Date	Local Milestones	National Events	Organisational Issues	Research Implications
September 2007	East Lancashire PEC support research proposal. Study commences			
Sep 2007- Jan 2009	Mandatory doctoral modules passed			
January 2009		UK enters global recession	Significant pressures on the NHS to reduce costs and make efficiency savings	
January – March 2010	NHS Research Ethics Approval attained to undertake field work			Difficulty with communication channels between University, NHS Research Ethics and local organisations.
May 2010		General election – Coalition government between Conservatives and Liberal Democrats replace Labour government	Significant organisational change within PCTs in an attempt to make savings.	
May 2010	Main fieldwork commenced in the form of audio-recorded interviews			Difficulty engaging PCT clinicians and managers from one organisation – possibly due to internal organisational change at the time.
July 2010		Publication of White Paper on NHS Reforms: Equity and Excellence: Liberating the NHS	Significant NHS Reforms. Proposal to implement fundamental changes to how primary care is commissioned.	
June 2011	Field work completed			Interviews undertaken at a time of uncertainty and change both at a national and local level. Priority to ensure research maintained a generic focus to retain relevance.
Jan – Feb 2012	Further literature review			To ensure more recent literature included and streamline current review.
April 2012- August 2013	Write up of final thesis		Local organisational change resulted in the researcher having to apply for jobs within the new structures and organisations.	Managing demand on new roles and responsibilities throughout write up period.

1.5 The Chapters

An outline of each chapter is provided in this section to provide the reader with a brief overview of the thesis and how it is organised.

1.5.1 Literature Review

The origins and underlying assumptions of principal-agent theory are discussed and examples of how the theory has been applied to research in health care are provided. Definitions, uses and models of performance management systems (PMSs) are discussed along with features and associated problems. Design features of effective sanction and reward schemes are outlined along with the problems that often lead to goal misalignment. Reasons for use of reputational incentives such as public release of performance data are discussed along with potential associated problems and barriers. Definitions of primary care-led commissioning are provided along with an explanation of how commissioning processes have been used in the past. Features and problems associated with primary care-led commissioning are discussed using examples of three former primary care commissioning models: GP Fundholding; Primary Care Groups (PCGs); and Practice Based Commissioning (PBC). The final section considers how the NHS reforms outlined in the White Paper: Equity and Excellence: Liberating the NHS (2010) could affect performance in primary care. This is considered in an environment of increasing pressure on the NHS to make efficiency savings with limited growth monies available over coming years for investment in local services.

1.5.2 Methodology

This chapter provides an overview of the methodological philosophy, different types of research methodology and research methods and demonstrates how these elements are inter-related through an over-arching methodological framework. The methodological philosophy relating to the two main research paradigms: positivist and phenomenological is explained along with their respective characteristics and ontological assumptions. The different types of research methodology and characteristics associated with positivistic and phenomenological approaches are described. Reasons for rejecting particular approaches and justification for selecting case study methodology are provided. The characteristics of case study methodology are explained and limitations associated with case study research are

provided. The role of theory in case study research and its importance in applying the findings to areas of wider significance is explained. The selected theoretical framework used in the research: Principal-Agent Theory is explained in the context of the study using two underlying assumptions: *goal alignment* and *information asymmetry*. The challenges with using this theory and reasons for its selection are described. A summary of research methods used at different phases of the research process is provided along with a detailed explanation of the purposive sampling techniques used. Details of how the formal, recorded interviews were undertaken, numbers and types of participants and follow up details are provided. A brief description of the data analysis including use of NVIVO8 software and matrix analyses techniques is provided.

1.5.3 Findings

This chapter provides a précis of the documentation reviewed as part of the data triangulation process associated with case study research. The Better Care Better Value (BCBV) performance framework is summarised. How the framework was developed by the NHS Institute for Innovation and Improvement to help trusts identify potential efficiency savings is explained. Each of the national clinical and prescribing BCBV performance league tables was reviewed and respective ranking of East Lancashire PCT identified. This was used to generate greater interest and ownership and facilitate discussion and debate with participants during the interview process. The same information was broken down locally at practice level to provide practice comparisons with national and PCT averages and enable comparison with other practices. Minutes from PCT meetings on primary care performance were reviewed as a part of the data triangulation process. The Practice Development Framework (PDF) Steering Group and the locally developed Balance Score Card formed part of the document review process. Analysis of the findings from eight informal, exploratory interviews, and 26 formal, recorded interviews are summarised and represented in a thematic analysis in the context of *information asymmetry* and *goal alignment*.

1.5.4 Discussion

The objective of the discussion chapter is to pull together the findings from the literature review and empirical research and present them in the context of the principal-agent theoretical framework. The discussion explores the meaning of the terms *performance*

management and performance measurement and how these are applied in practice. Systems used to manage performance in primary care including: The Quality and Outcomes Framework (QOF), a locally developed practice development framework (PDF) and the Better Care Better Value Productivity Performance Management Framework are explored and compared with features applied in the private sector. These are considered in the context of the principal-agent theoretical framework.

The relationship between managers and clinicians in primary care is explored alongside the academic literature and considered in the context of the principal-agent assumption of *information asymmetry*. The relationship between autonomy and accountability is explored further through the empirical findings and academic literature in the context of the same theoretical assumptions of information asymmetry and goal alignment. Stakeholder engagement and contract inclusions are further concepts explored in this chapter. Findings from both the empirical research and academic literature make reference to strategic behaviour or *gaming* leading to unintended consequences. These are also explored in detail.

An important element of the principal-agent theory is use of incentives and rewards. This is discussed in the context of goal alignment. Several concepts relating to incentives and rewards are explored. This include: use of financial incentives; engagement and ownership; incentives across teams; and strategic behaviour leading to unintended consequences. These are explained using the theoretical assumptions of information asymmetry and goal alignment. The literature and findings on public release of performance data are discussed and explained using principal-agent assumption of goal alignment. Themes emerging from the empirical research and academic literature on public release of data include: use of data to change behaviour and provide accountability. A requirement to achieving goal alignment is the need for credible, validated and timely information. Problems can arise from misunderstanding and misinterpreting publicly available information. Essential features that need to be considered include social demographics, trust, level of reporting and consumer choice. The academic literature on former primary care-led commissioning models and respective features that facilitate or block goal alignment is analysed alongside the empirical findings. This can be used to inform future developments and challenges facing primary care performance as Clinical Commissioning Groups (CCGs) take on full commissioning responsibilities.

1.5.5 Conclusion

The final chapter begins by restating the research question. The research question is answered by breaking it down into three sub-questions on: understanding the meaning of performance management; use of performance management systems; and understanding the barriers to improving performance management in primary care. The principal-agent theoretical framework is used to explain the findings relating to each of these aspects. Limitations on usefulness of the theoretical framework are identified. The chapter concludes by outlining the implications of the study for practice, policy makers and contribution to academic research.

Chapter 2

Literature Review

Methodology

A systematic approach was initially used to undertake the literature review using a range of key words: *Performance; management; measurement; primary care; outcomes performance frameworks; pay-for-performance; incentives; sanctions and rewards*, across a range of medical and management databases: Medline; Embase; AMED; DH-Data; Kings Fund and HMIC. This produced several thousand references, the majority of which were not relevant to the research study. Thus, as this was qualitative research, a snowball approach was chosen using key references from important relevant sources, systematic reviews and key authors from the field of the subject matter. This approach proved more successful, efficient and productive in identifying the relevant literature.

2.0 Introduction

The chapter provides an overview of Principal-Agent Theory, a theory that emerged from the Economic Theory of Incentives. Two theoretical assumptions of this framework; *information asymmetry* and *goal alignment* are used to organise the literature and help contextualise the findings. Section 2.1 provides an explanation of incentives in economic thought along with information on the origin of the theory and how it emerged over time with examples of where historical figures used the theory in different situations. A description and explanation of the theoretical assumptions of principal-agent theory is provided. How the theoretical framework has been used to help understand various governance relationships between different tiers of management and professionals from a range of disciplines both in the private and public sector is summarised. The academic literature on how the theory has been used in health services management is highlighted which includes: understanding the inter and intra-

organisational relations in the commissioning of secondary care services (Baxter et al 2008); the impact of incentives and dysfunctional behaviour amidst imperfect systems (Goddard et al 2000); understanding decentralisation strategies (Mannion et al 2005) and demonstrating economic relationships of co-operation and trust (Goddard et al 1998). Most of these studies use the theory to explore the dynamics of the relationship between and within secondary care providers (representing the agent) and commissioning organisations (representing the principal). This study uses the same theoretical framework to explore the relationship between senior and middle managers, primary care clinicians and practice managers with respect to use of performance management in primary care.

The meaning of the terms *performance management* and *performance measurement* is explored. Use of performance management systems are described in section 2.3 using examples from both the private and public sector (Purcell and Hawtin 2010; Keegan et al 1989; Lynch and Cross 1991; Brown 1996; Kaplan and Norton 1992; Neely and Adams 2001). Key features associated with successful performance management systems (PMSs) and achievement of goal alignment is provided (Keegan et al 1989; Kaplan and Norton 1992; Kennerley and Neely 2002; Propper 2003; Greiling 2006). Problems associated with PMSs that can contribute to goal misalignment are explored (Sheldon 2005; Audit Commission 2000; Davies and Lampel 1998; McColl et al 1998, Smith 1995).

Use of incentives is an important aspect of performance management systems and is a fundamental element of the principal-agent theory in terms of facilitating goal alignment. The literature on sanction and reward mechanisms in relation to achieving desired organisational goals is outlined in section 2.7 along with associated problems. Use of pay-for-performance schemes in healthcare draws largely on research undertaken in the UK (Doran et al 2006; Roland 2004) and the US (Epstein 2006; Epstein et al 2004; Rosenthal et al 2005). Despite a lack of research to either support or deny their effectiveness in motivating improved quality and cost-effectiveness of healthcare (Rosenthal & Frank 2006) and despite concerns over their unintended consequences, incentive programs continue to be introduced. Examples of various schemes introduced over time and their respective outcomes are provided along with some of the unintended consequences which can arise from implementing such schemes. The Quality and Outcomes Framework (QOF) is probably the most important and well recognised performance management framework for GPs which constitutes a key component of the

National General Practitioner contract both in terms of quality outcomes and financial rewards. A brief review of the literature on the application and evaluation of QOF which was introduced in 2004 concludes this section. Although the literature shows that financial rewards are the most popular types of incentives used within health care and other public and private sector organisations, alternative incentive programmes such as public release of performance data is increasingly being used as a method to improve performance (Davies and Marshall 1999) thus the literature in this field is explored in some detail in section 2.7.3. An account of the problems associated with public release of performance data this concludes section.

Changes in primary care commissioning arrangements have occurred over time since the mid-nineties. This required further exploration of the literature to understand the impact that performance management has had on achieving desired objectives and how various incentives formed a component of these commissioning models. Section 2.8 provides examples of how commissioning processes have been applied to enable an understanding of the concept and clarify the context. Section 2.8.3 provides an overview of the literature associated with three primary care-led commissioning models: GP Fundholding, Primary Care Groups (PCGs) and Practice Based Commissioning (PBC), outlining the positive and negative aspects of the different models that could either help or hinder the facilitation of goal alignment.

Two years into the study a change of government and the publication of the White Paper: Equity and Excellence: Liberating the NHS (DH 2010) outlined significant NHS reforms. This prompted the researcher to undertake a further review of more recent publications relating to the intentions of the reforms and potential risks associated with their implementation in the proposed timescales. Large cuts in management costs, the abolition of primary care trusts and strategic health authorities and inadequate change management could result in the risk of being unable to implement required changes in the proposed timescales (The Kings Fund 2010a). This review is summarised in section 2.8.5.

As the economic position worsened with no growth monies available to invest in NHS services, more pressure was being placed on NHS organisations to make efficiency savings and improve productivity. Strategies available to the NHS for improving productivity are

described in section 2.8.5. These include reducing variations in clinical service delivery (as highlighted by the Better Care Better Value (BCBV) productivity indicators) and ensuring that patients receive added value and improved health outcomes from existing budgets. This involves focussing on three key areas: reducing expenditure on low-value interventions; redesigning pathways (especially for patients with long-term conditions) and avoiding unnecessary hospital admissions (Dixon and Ham 2010).

2.1 Origins of Economic Theory

Principal-agent theory emerged from the economic theory of incentives. This is the theoretical framework used in the study to attain a better understanding of: the importance; use; and problems associated with performance management by managers and clinicians in the English NHS. The following section will provide an overview of the economic theory of incentives and explanation of how principal-agent theory emerged from this. Examples are used to understand the theory along with reference to how theorists have come to view the theory over time.

Economics often involves incentives. For example: incentives to study; incentives to produce quality products; incentives to invest; incentives to save. A central question surrounding economics today is how organisations can be designed to provide adequate incentives for economic agents. Economists have analysed the use of incentives in understanding how firms manage to align the objectives of its various members such as workers, supervisors and managers to maximise profits.

The owner of a firm must delegate tasks to individual members of the organisation which leads to an initial problem of managing information flows within the firm. However, various members may have different objectives than the principal who has delegated the task to the agent and information about the agent is imperfect. Thus, conflicting objectives and decentralised information are the two main elements of incentive theory. Arrow (1968) observes:

“by definition the agent has been selected for his specialised knowledge and the principal can never hope to completely check the agent’s performance.”

(As cited by: Laffont and Martimort 2001; pp.12)

Established economics literature provides a plethora of information which should be considered when designing incentive programmes. Whilst normally applied to contracts between employers and employees, it can also be relevant to incentives for teams and organisations. Economic theory is described as:

“a problem whereby one party (the employer or ‘principal’) needs another party (the employee, contractor or ‘agent’) to act to deliver the first party’s objectives, but the principal cannot fully control (or even observe) the activity of the agent. The central dilemma being that the contractor or agent has an informational advantage and different objectives to the employer or principal. The agent’s objectives are often to maximise its own profits, rather than to produce the maximum quality or quantity of the good the principal desires.”

(NAO (2008); pp 6)

The references from both Laffont and Martimort (2001) and the National Audit Office (2008) can be applied to various relationships in healthcare, whether this is between organisations such as commissioners and providers or between individual professionals such as managers and clinicians. Whichever stakeholder represents the principal or agent in that relationship will depend on the situation being studied. In this study, the principal is represented by the commissioning organisation or the PCT and the agent by the GP practice whereby the PCT requires the GP practice to deliver the PCTs objectives but the PCT cannot fully control or even observe the activity of the GP practice thus resulting in the agent or GP practice having an informational advantage over the principal or PCT.

The principal-agent problem can be found in contractual agreements that are written amidst a world of information asymmetry, uncertainty and risk where principals can never hope to completely check an agent’s performance. The term adverse selection is the classic, economic expression to describe a principal-agent problem in which the agent has private information about a parameter of optimisation problem (Laffont and Martimort 2001).

Certain economic theories are related to and influence each other. For example *general equilibrium theory* interacts with the theory of incentives. General equilibrium theory is the branch of theoretical economics which studies the behaviours of supply, demand and prices across whole economies. These have several interacting markets in an attempt to demonstrate

that a range of prices exist which result in an overall (general) equilibrium (Laffont and Martimort 2001). Game theory and organisational theory are two further important theories which influenced the development of principal-agent theory. Game theory is concerned with the optimum choice of strategy in situations involving a conflict of interest (Collins 2003) through maximising gains and minimizing losses within prescribed constraints (Websters 2010). Organisational theory is concerned with how organisations function and how they affect and are affected by the environment in which they operate (Jones 2013).

Spence (1974) and Rothschild and Stiglitz (1976) demonstrated that information asymmetry was creating a greater challenge that could not be adequately embedded within general equilibrium theory. This led to equilibrium theorists having to reconsider the problem of exchange of information in its basic form such as between two traders. Together, equilibrium theorists, game theorists and groups trained in organisational theory built on the theory of incentives to develop contract theory, principal-agent theory and agency theory (Laffont and Martimort 2001).

The following section provides a brief account of the history of thought pertaining to the theory of incentives. It demonstrates that questions relating to incentives have been present in many areas of economics over the last century despite it only recently being recognised as an important aspect of the discipline. Incentive theory emerges with the division of labour and exchange which induces the need for delegation. Laffont and Martimort (2001) describe the origins using incentive theory in agriculture (Smith 1776) and management (Babbage 1835; Barnard 1938), how the theory originated and the thought processes behind its development. Wicksell (1896) discusses the ‘free rider’ problem associated with incentives. Borda (1781), Bowen (1943) and Vickrey (1960) apply the theory of incentives to ‘voting’ outlining the implications of the system which can lead to strategic behaviour (Laffont and Martimort 2001). Finally, Pauly (1974) discusses the concept of ‘moral hazard’ associated with incentives by application to insurance models.

2.1.1 Incentive Contracts in Agriculture and Management

The first historical contracts appear to have evolved from agriculture where a landlord contracts with his tenant. Although Adam Smith amply confirmed this more than two hundred years ago in his analysis of sharecropping contracts, only in recent decades has a

theory begun to emerge to place the topic at the heart of economic thinking. Adam Smith (1776) recognised the contractual relationship between the masters (principals) and the workmen (agents) in his discussion on determination of wages. He outlined the conflicting interests, recognising that the bargaining power was not distributed evenly between the two parties (Chapter VII, Book I in Smith (1776):

“What are the common wages of labour, depends everywhere upon the contract usually made between those two parties, whose interests are not the same. The workmen desire to get as much, the masters to give as little as possible.”

(Cited in Laffont and Martimort 2001 pp.18)

Despite this concept by Smith dating back centuries, a similar analogy can be applied today in various contractual relationships in both the private and public sector. In the context of this study the workmen or agents might be considered as the clinicians and the masters or principals as the managers. In this situation the agents are likely to have different goals to the principals. For example: Priorities for clinicians may be to make as much money as possible for them as individuals or to provide treatments to their patients as individuals no matter what the cost or evidence base. Priorities for managers on the other hand may be to ration resources and treat as many patients as possible within available resources and achieve financial balance. The two objectives are polar opposites thus achievement of the overall strategic objective is unlikely to happen unless such issues can be overcome to achieve goal alignment.

Babbage (1835) recognised the need to measure performance in developing profit-sharing contracts and proposed that remuneration should be rewarded according to the following two principles:

- i. That a considerable part of the wages received by each person should depend on the profits made by the establishment;*
- And*
- ii. That every person connected with it should derive more advantage from applying any improvement he might discover than he could by any other course.”*

(Cited in Laffont and Martimort 2001, pp. 21)

One might argue that the principles outlined by Babbage cannot be applied in the public sector where profit-related pay does not exist. However, although GPs provide services on behalf of the NHS, they are also independent contractors who run their practices as private businesses intended to maximise profits for the partners. Thus, Babbage's principles can be applied here where the agent or GP aims to achieve maximum targets outlined within the national contract and is subsequently remunerated according to the number of targets achieved. *Profit-sharing* in this sense applies internally to the partners or agents within a practice rather than between the principal (PCT) and agent (GP practice). This is unless money is clawed back on retrospective analysis of performance data which might indicate strategic behaviour resulting in unintended consequences.

Barnard (1938) was probably the first to define a general theory of incentives in management:

"an essential element of organisations is the willingness of persons to contribute their individual efforts to the cooperative system... Inadequate incentives mean dissolution, or changes of organisation purpose, or failure to cooperate. Hence, in all sorts of organisations the affording of adequate incentives becomes the most definitely emphasized task in their existence. It is probably in this aspect of executive work that failure is most pronounced."

(pp.139)

Barnard's emphasis on the importance of incentives remains relevant today and can be considered in the context of this study. Without adequate use of incentives it is unlikely that GPs would cooperate or engage with the principal to achieve the desired goals. In this context goal incongruity can exist between Strategic Health Authorities and PCTs, GP practices and PCTs and even between GPs and patients. Barnard (1938) considered both monetary and non-monetary incentives and specific and general incentives:

"The specific inducements that may be offered are of several classes, for example: a) material inducements; b) personal non material opportunities; c) desirable physical conditions; d) ideal benefactions. General incentives afforded are, for example: e) associational attractiveness; f) adaptation of conditions to habitual methods and attitudes; g) opportunity of enlarged participation; h) the condition of communion."

(pp.142)

Again these concepts outlined by Barnard remain relevant and can be applied to this study. Although financial reward is probably the most common form of incentive and is a key component of the primary care contract for GPs, other factors can also be considered as incentives such as: application of less scrutiny and challenge to the better performing practices; winning accolades and awards for particular projects which may be relevant to principal and/or agent; and receiving positive patient feedback which may act as an incentive for further investment in a GP practice or particular service.

Barnard (1938) highlighted the need to strike a necessary balance of the various types of incentives for success. Attaining such a balance is dependent on an unstable environment (through competition in particular) and of the evolving processes within an organisation itself (growth, change of personnel). In his final chapter on authority, Barnard recognized that use of incentives in isolation did not generate a successful organisation. In his opinion, the distribution of authority along communication channels is essential to achieving coordination and promoting cooperation:

“Authority arises from the technological and social limitations of cooperative systems on the one hand, and of individuals on the other.”

(pp.184)

Barnard’s findings can be applied to this study. Other than use of incentives alternative strategies such as ownership, engagement, motivation, influence and teamwork are just as important in achieving goal alignment.

2.1.2 The problems of ‘Moral Hazard’ and ‘Free-Rider’

Wicksell (1896) highlighted what became known as the ‘free-rider’ problem in relation to taxation associated with incentives which had not formerly been considered:

“If the individual is to spend his money for private and public uses so that his satisfaction is maximized he will obviously pay nothing whatsoever for public purposes... Whether he pays much or little will affect the scope of public service so slightly, that for all practical purposes, he himself will not notice it at all. Of course, if everyone were to do the same, the State will soon cease to function.”

(Cited by: Mayes and Wood 2013; pp.177)

Wicksell's observation can be applied to the NHS as a public sector organisation. It demonstrates how, without general taxation, an individual's self-interest may result in the NHS ceasing to function. The concept of free-riding remains relevant in the NHS today where individual agents allow others within a team to do the majority of work. This becomes a greater problem as teams increase in size and it becomes easier for individuals to disguise their lack of contribution. This concept is discussed in more detail in section 2.7 on *incentives and rewards*.

The need to induce appropriate effort from all members and at all levels within an organisation creates the problem of 'moral hazard' and the recognition of a need for authority relationships within an organisation to deal with issues not covered by incentive contracts:

"A person can and will accept a communication as authoritative only when..., at the time of his decision, he believes it to be compatible with his personal interest as a whole."

(Cited by: Laffont and Martimort 2001; pp.23)

Gaming and unintended consequences are often associated with incentive programmes. Incentives and the problem of strategic voting have been well recognised over the years by Bowen (1943) and Vickery (1960):

"At first sight it might be supposed that this information could be obtained from his vote... But the individual could not vote intelligently, unless he knew in advance the cost to him of various amounts of the social good, and in any case the results of voting would be unreliable if the individual suspected that his expression of preference would influence the amount of cost to be assessed against him."

(Bowen (1943), as cited by: Laffont and Martimort 2001, pp.25)

"individuals may be able to gain by reporting a preference differing from that which they actually hold."

(Vickery (1960), as cited by: Arnott et al 1996, pp.38)

"Such a strategy could, of course, lead to a counterstrategy, and the process of arriving at a social decision could readily turn into a 'game'" in the technical sense."

(Vickery (1960); as cited by: Arnott et al 1996, pp.38)

Issues relating to ‘gaming’ and unintended consequences are widely recognised today in health care with numerous examples from the literature highlighted in section 2.7.1. Other examples that emerged from the empirical findings are highlighted and discussed in chapter 4, section 4.5 and chapter 5, section 5.4 respectively.

In economic theory a moral hazard is a situation where there is a tendency to take undue risks because the costs are not borne by the party taking the risk. Moral hazard arises because an individual or institution does not take the full consequences and responsibilities of its actions. This results in a tendency to act less carefully than one otherwise would, leaving another party to hold some responsibility for the consequences of those actions (Laffont and Martimort 2001). Moral hazard has been explained by economists as a special case of *information asymmetry*, a situation in which one party insulated from risk has more information about its actions and intentions than the party paying for the negative consequences of the risk (Holmstrom 1979). More likely, moral hazard occurs when the organisation with more information about its actions or intentions has an incentive to behave inappropriately from the perspective of the party with less information. Moral hazard can be used to explain the principal–agent relationship where the agent has more information and may have an incentive to act inappropriately if the interests of the agent and principal are not aligned as the principal cannot fully monitor the agent’s behaviour (Laffont and Martimort 2001).

Moral hazard is a concept that can be applied to situations that may arise in the NHS. There is no incentive for NHS employees to save money as this does not affect their income as the majority of employees have a set salary whether or not they meet particular targets or make savings. Neither is there an incentive for patients to use health services responsibly and efficiently because services and medicines are free at the point of access therefore individually they are not bearing any financial risk. In the context of this study the concept of moral hazard could be applied to examples from both the literature and empirical findings. An example is where a GP may consider the financial reward attached to a particular target as being a priority as it is compatible with his personal interest and wealth, however achieving that target may not necessarily benefit patients.

2.1.3 Principal-Agent Theory

While recognising the limitations of the incentives paradigm with respect to multiple cultural phenomena that shape society over time, one solution to the problem of adverse selection is to develop and implement an appropriate range of incentives so that agents behave in the way the principals wish through mutual alignment of objectives. However, even in the limited arena of employment contracts, the difficulty of doing this in practice is reflected in a multitude of compensation mechanisms ('the carrot') and supervisory schemes ('the stick'). Both private and public transactions provide examples of contracting situations plagued with informational problems of the adverse selection type:

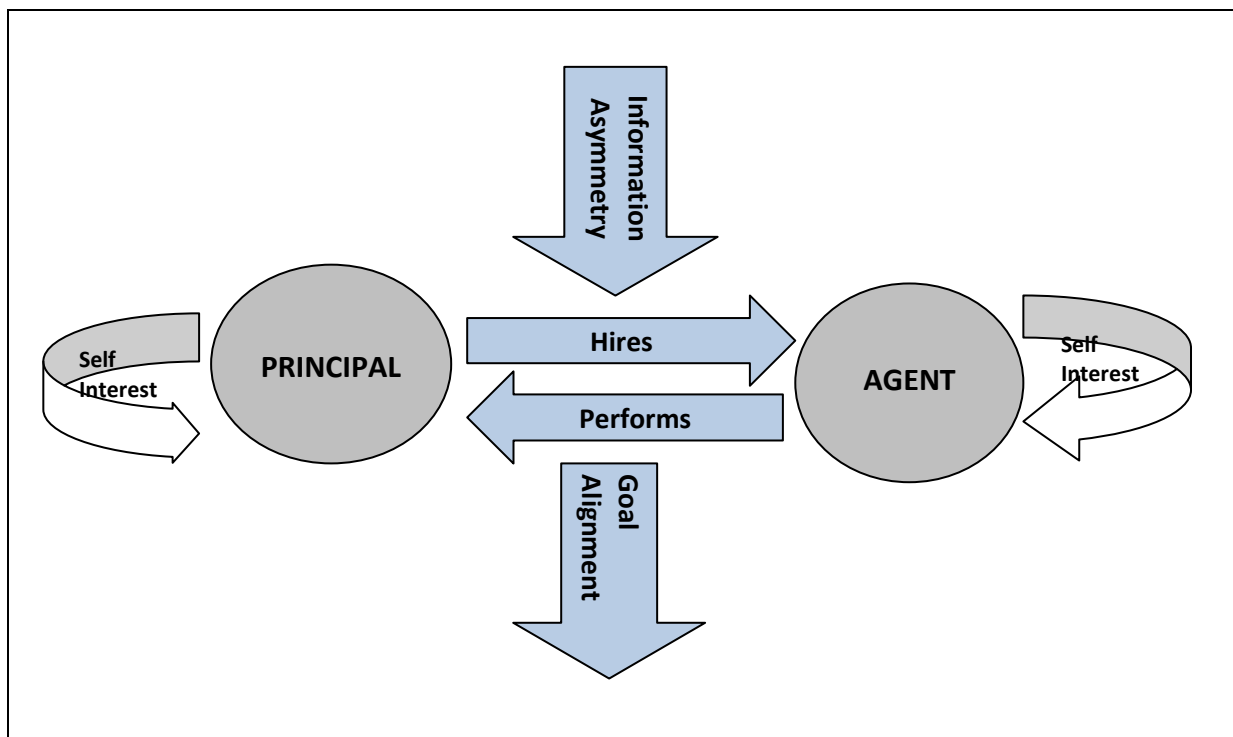
“The landlord delegates the cultivation of his land to a tenant, who will be the only one to observe the exact local weather conditions. A client delegates his defence to an attorney who will be the only one to know the difficulty of the case. An investor delegates the management of his portfolio to a broker, who will privately know the prospects of possible investments..... An insurance company provides insurance to agents who privately know how good a driver they are.....”

(Laffont and Martimort 2009; pp.29)

Similar concepts can be applied to organisational relationships in healthcare. Sometimes these can be more complex which may involve principals and agents at various levels and which may act as the principal or agent depending on the relationship and context of the performance issue in question. For example: The SHA performance as a whole depends on the constituent PCTs achieving a range of targets which subsequently relies on PCTs performance managing provider trusts and GP practices to achieve pre-determined performance measures which then requires all practice staff to work together and perform well as a team to reach the required targets. This relationship continues through to the level of an individual patient who would ultimately represent the principal with an expectation that the GP would provide high quality healthcare to them as patients. The GP as the ultimate agent in a position of power is or is not able to meet the obligation of the patient depending on a variety of factors such as: values of individual agents, availability of incentives, agents' knowledge and skills and work effort.

Other relationships in healthcare can be considered in the context of principal-agent theory. For example: A PCT contracts with a hospital provider to deliver a high standard of care for patients without knowing or understanding the details of what constitutes this standard; A GP delegates responsibility for achieving targets on a long term condition to his or her practice nurse without knowing exactly how these have or have not been achieved; A SHA relies on performance information submitted from PCTs without checking the accuracy or robustness of this data; A patient follows advice from a healthcare professional without checking the accuracy or evidence on which the advice is given. In this study the relationship being explored is that between PCTs as the commissioning organisation representing the principal and GP practices as providers representing the agent. Principal agent framework is summarised in figure 2.0.

Figure 2.0: Basic concept of Agency Theory



This relationship may arise in the public sector between different bodies within the chain of delivery. This could be applied between organisations such as departments within governments acting as the principals and provider organisations acting as the agents or within organisations where managers might act as the principals and employees as the agents.

Milgrom and Roberts (1990) describe the risk averse assumption of economic theory as, the more risk averse the agent, the more the output depends on factors outside the agent's control. Also, the less accurate the measurement of outputs, the '*less sharp*' an optimal incentive structure will result.

Where an agent has to perform multiple tasks, the sanction/reward should be linked to performance across all tasks to avoid actions being skewed towards those tasks that are most easily measured (Holmstrom and Milgrom 1991).

A third assumption is that; where there are multiple stakeholders (principals) such as those that existing in the public sector, priorities may not be fully aligned giving rise to potentially conflicting objectives. In contrast to the private sector where generally the owners' interests are focused on the single objective of value maximization (Dixit 2002), public sector bodies are often expected to simultaneously achieve cost-effectiveness as well as quality objectives. The implication of this means that not only will the presence of multiple principals result in less effective optimal incentive schemes in the public sector, but will also be more difficult to design and monitor (NAO 2008).

The difficulties of measuring inputs and outputs in the public sector make the collection of monitoring information more expensive and can often increase the risk of inadvertently distorting agents' behavior in undesirable ways. Besley and Gahtak (2005) argue that by matching principal and agent 'mission preferences' the requirement for high powered incentives to leverage agent effort is reduced.

Although *information asymmetry* and *goal alignment* are the two main underlying assumptions of principal-agent theory, according to the literature, there are a number of other hypotheses that are illustrative of this theory although not all authors would necessarily subscribe to all those listed and most of them can be attributed back either directly or indirectly to the two assumptions of *information asymmetry* and *goal alignment*.

Some of these hypotheses are listed in table 2.0

Table 2.0: Hypotheses illustrative of principal-agent theory (Garson 2013 pp.70)

➤ The more ambiguous the relation of means to ends, the greater the information advantage of the agent. The greater the agent's information advantage, the higher the information costs to the principal.
➤ The more ambiguous the relation of means to ends, the less effective a priori regulation and rules stipulated by the principal.
➤ The more complex the process (ex. the more autonomous and semi-autonomous units involved), the higher the information costs.
➤ The lower the information costs to the principal, the better the oversight of the agent. The more the oversight of the agent, the better the performance.
➤ The higher the information costs, the more likely the contract will be specified in terms of agent efficiency rather than agent effectiveness.
➤ The more risk-averse the agent, the more the agent will increase information costs to the principal.
➤ The more transparency provisions are written into the contract, the lower the information costs.
➤ The more performance outcomes are written into the contract, the more successful the outsourcing.
➤ The more the agent puts up in performance bond, the better the performance.
➤ The more the goals of the selected agent are similar to those of the principal, the more outcomes will be those sought by the principal.
➤ The better the information provided by past agents, the more effective the performance standards framed by the principal.
➤ The less the investment in principal-agent communication channels, the more the goal incongruity between principal and agent.
➤ The more the goal incongruity, the greater the information costs.
➤ The higher the cost of information, the more the principal will satisfice rather than optimize.
➤ Raising salaries of officials reduces corruption in states characterized by benevolent principals and corrupt agents, but not in states characterized by corrupt principals and corrupt agents.
➤ Decentralization reduces corruption only when central officials are less benevolent and democratically accountable than are lower officials.

2.1.4 Use and challenges of principal-agent theory

Financial incentives are often developed to try and alter behaviour. In health care, agency theory can be used to describe the relationship between commissioning and provider organisations. In this study the commissioning organisation (PCT) represents the principal and the provider (GP practice) represents the agent. The principal must contract with the agent who provides the specialist knowledge and skills to deliver an objective. If the principal cannot monitor performance of the agent to an adequate standard, self-interest of the agent may dominate and conflicting objectives with the principal may result. Rather than hiring the agent solely for provision of effort, the principal may contract with the agent based on measures relating to outcomes (Eisenhardt 1989) which will be financially incentivised in order to improve goal alignment between the principal and agent. The agent is considered a composite in this model as although the health care provider (or agent) may receive payment, it cannot affect overall desired performance without co-operation of other clinicians across the organisation.

Principal agent theory has been used in health services management research to: Explore the inter and intra-organisational relations in the commissioning of secondary care services in the NHS (Baxter et al 2008); illustrate the incentives that exist for dysfunctional behaviour within healthcare when only imperfect systems are available (Goddard et al 2000); develop an understanding of decentralisation strategies (Mannion et al 2005) and demonstrate the economic relationships of co-operation and trust (Goddard and Mannion 1998).

There are many complex assumptions and extensions to principal-agent theory when considering in the context of health care. Baxter et al (2008) considers the multiple and hierarchical nature of inter and intra-organisational relationships:

“A principal may not contract directly with the agent producing the goods. Instead, there may be a chain of relations; a principal contracts with an agent who then contracts with another agent lower down the principal-agent chain”

(Baxter et al 2008; pp.114)

The theory assumes that where a chain of relationships are formed from several principals and agents, collusion may occur between the middle principal-cum-agent and lower agent to promote their own interests in preference to those of the higher principal. This is even more

likely if the higher tier is from a different organisation than the lower tiers. To overcome this problem, the higher principal should adopt an incentive scheme that makes it more beneficial for the middle principal-cum-agent to work with the higher principal rather than collude with the lower agent (Baxter et al 2008).

Nahra et al (2006) used the principal-agent theoretical framework to examine the cost-effectiveness of a hospital incentive programme where the insurer represented the principal and hospitals represented the agents. Quality adjusted life years (QALYs) gained were the outcome measures used to determine improvements. The results suggested that pay-for-performance schemes could improve quality of hospital care, be cost-effective and improve adherence to treatment protocols.

Autonomy and motivation are considered important features of performance management. Enhanced autonomy can motivate managers to improve performance (Frey 2000; Le Grand 2003) providing the concept is valued, it brings the expected freedoms and flexibilities and its associated benefits outweigh any unintended consequences. A successful performance management programme will depend upon the level to which the incentive arrangements align with the motivations of individuals whose behaviour it wishes to influence (Frey 2000; Le Grand 2003). McGrath (2001) describes two distinct types of autonomy: '*supervision autonomy*' which relates to organisational control by managers and '*goal autonomy*' which relates to the extent to which organisational goals are free from managerial control. The balance between the two is a difficult one to achieve.

Mannion et al (2007) builds on this concept by concentrating on the principal-agent relationship between the Department of Health and senior hospital managers. He describes the tension that exists between the two. The Department of Health refer to local decision making as being a priority which conflicts with the perspective of local managers who refer to nationally imposed constraints under which they operate. Mannion et al (2007) also highlights the importance of reporting on performance measures which represent a robust, global measure of performance for the whole organisation. The old hospital star rating system introduced in 2001 is an example of incomplete and inaccurate information used to demonstrate quality which can lead to good performers being labelled as poor and poor performers labelled as good. The consequences of implementing such a system can lead to underperforming organisations being subject to less control and highly performing organisations having their freedoms curtailed. This system was withdrawn in 2005. Despite

this, performance management league tables and balanced scorecards using tangible measures are as prevalent eight years on. The Mid Staffordshire report (Francis 2013) demonstrated that despite having such systems in place, this did not prevent the catastrophic outcomes and numerous examples of inadequate quality and poor standards that emerged from this investigation.

Styles of management may also be considered important in the context of goal alignment and agency theory. Different management styles can lead to conflict and dysfunction between different tiers of management unless managers are able to develop a range of different styles to achieve overall desired goals and objectives. Marshall et al (2003) identified two distinct and polarised management styles: A directive approach which tends to be adopted by senior managers often at executive level whose agenda is driven principally by achievement of short-term performance targets and peer competition with the desire to deliver a political agenda. In contrast, middle managers appear to adopt a more facilitative approach, focussing on gaining trust, building relationships and using peer support to facilitate longer-term changes in culture from within rather than imposing change from outside.

A number of studies have used principal-agent theory to explore commissioning relationships with secondary care where the provider or hospital represents the agent. There is limited research using this theory in primary care where the general practice represents the agent. There is a dearth of evidence in primary care research on how incentives can be developed to enable agents within the NHS to be motivated to make optimal use of its' resources in achieving the best possible outcomes. Financial rewards must be considered in the context of the normative, caring elements of GPs in achieving efficient and equitable health outcomes with any material aspects and self- interest (Hausman and Le Grand 1999). Little hard evidence exists concerning doctors' motivations with respect to the competing claims of self-interest, caring and normative commitment. A number of surveys undertaken by the British Medical Association (BMA 1995a, b, c) suggest that self-interested concerns, at least with respect to income, leisure time and family activities, do play a significant role in doctor motivation. The principal-agent theoretical framework is used in this study to attain a better understanding of performance management in primary care.

2.2 Definitions of Performance Management

Lebas (1995) defines performance as:

“the potential for future successful implementation of actions in order to reach the objectives and targets”

(pp.23)

Armstrong and Baron (2004) describe performance management as:

“a process which contributes to the effective management of individuals and teams in order to achieve high levels of organisational performance”

(pp.2)

Performance management should be both strategic in nature through defining an organisation’s broader vision and long-term objectives as well as integrating the various aspects of the business such as people management, individuals and teams. It is about developing a strategy which relates to every activity of the organisation and establishing a culture in which individuals and groups take responsibility for the continuous improvement of business processes and of their own skills, behaviour and contributions. It involves developing clear objectives and business plans, sharing expectations, improving the quality of interrelationships and defining clear indicators that can be measured. Performance management is a continuous process and should pervade every aspect of running an organisation (Armstrong and Baron 2004).

According to the Office of Government Commerce (OGC) performance management is:

“the activity of tracking performance against targets and identifying opportunities for improvement.”

(www.ogc.gov.uk 19.02.2010)

Performance management underpins the operations and processes within a strategic change programme framework that requires flexible targets reactive to change at all levels; from top management policy development through to efficiently run operations. Performance

management identifies opportunities for maximising improvements in managing service delivery in the future and facilitates decision making about investment routes, affordability and setting investment priorities in the face of competing demands for resources (OGC 2010).

Lebas (1995) provides an explanation of the differences between performance management and performance measurement; terms that are often used interchangeably. He explains that performance measurement and performance management are not separable; they are closely intertwined where measurement and management follow one another in an iterative process. Performance management precedes and follows performance measurement, in a virtuous spiral and performance management creates the context for measurement.

Figure 2.1 provides a schematic view of the relationship.

Figure 2.1: Relationship between performance management and performance measurement (Lebas 1995)

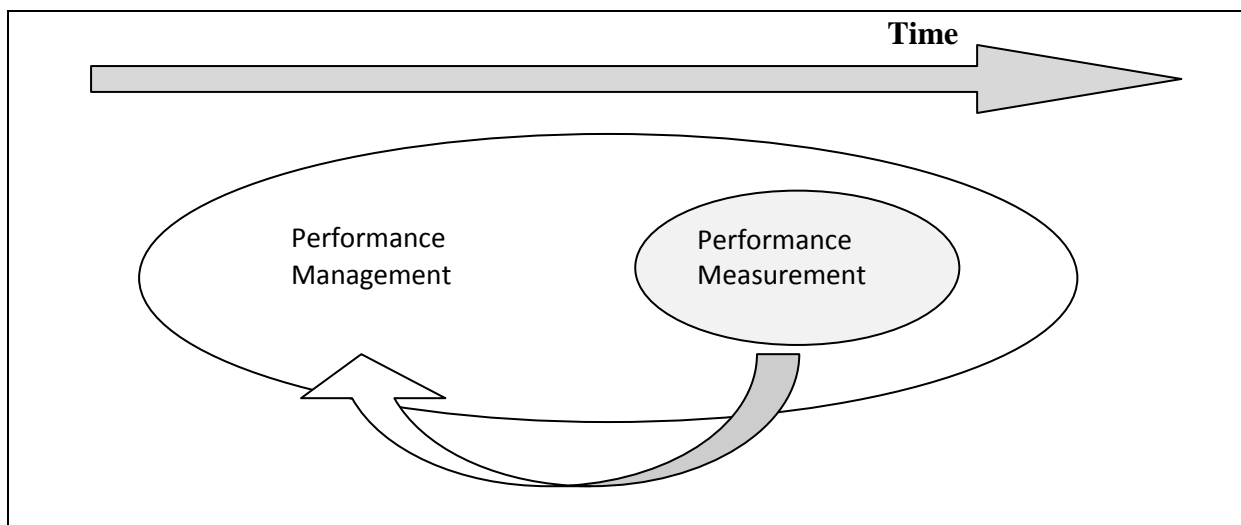


Table 2.1 identifies the characteristics of the processes involved in performance measurement and performance management Lebas (1995).

Table 2.1: Processes and preoccupations relating to performance measurement and management (Lebas 1995)

Performance Measures	Performance Management
Measures based on key success factors	Training and multi-competence
Measures for detection of deviations	Team work and employee involvement
Measures to track past achievements	Dialogue
Measures to describe status potential	Management style
Measures of output	Attitudes
Measures of input	Shared vision
	Incentives and rewards

Lebas (1995) concludes that a powerful performance management system is one that supports measures that: give autonomy to individuals within their span of control; reflect cause and effect relationships; empower and involve individuals; create a basis for discussion and supports continuous improvement the decision making process.

2.3 Use of Performance Management Systems

In the 1990s, private sector organisations began to be placed under pressure to demonstrate quality and value of service through improved customer focus, flexibility and innovation as well as cost (Neely 1999). The following decade saw a greater emphasis on improving the effectiveness of public services through the use of private sector principles (Radnor and

McGuire 2004). Where balanced performance measurement systems as the approach for management have been adopted by organisations, performance tends to be better than those where such systems have not been used (Lingle and Schiemann 1996). Similarly, organisations who managed to integrate evaluation activities into daily operations and strategic management or quality assurance processes proved to be more successful compared with similar organisations that didn't (Carmen and Fredericks 2010).

Kennerley and Neely (2002) describe the constituent parts of a performance measurement system as:

- i. *Individual measures that quantify efficiency and effectiveness of actions.*
- ii. *A suite of measures that can be combined to assess performance of an organisation as a whole.*
- iii. *A supporting infrastructure that enables data to be acquired, collated, sorted, analysed, interpreted, and disseminated.*

To maximise the value and effectiveness of performance measurement activity it is important for organisations to gain full benefit at each of the levels indicated (Kennerley and Neely 2002).

Organisational performance is important in both the public and private sector because most accountability and financing systems tend to be built around organisational structures rather than programs or policies. The Audit Commission (1999) highlights two important reasons for requiring performance management systems in modernising government services:

- i. To improve delivery of public services through more efficient and effective commissioning arrangements.
- ii. To ensure organisations are held to account for their use of resources and outcomes achieved.

Accountability is one of the key drivers for measuring performance. Hofer (2000) refers to accountability as providing assurance that resources are linked to outcomes:

“to ensure that resources allocated to programmes achieve something worthwhile and measurable”

(pp.167)

Using the right approach for performance management enables organisations to identify successes as well as areas for improvement. The role of performance measurement and clinical indicators has changed from being a minor component in the management of health care to one where the demands for greater accountability, safety, efficiency, and quality have accentuated the role of measurement and reporting. This information is integral to an organisation's strategic planning and allows managers to make the necessary changes required to be successful over time.

As with any complex organisation in the private or public sector a balanced performance management system should be aligned with strategic focus and reflect the corporate objectives of the organisation and performance indicators should provide valuable information to enable managers to make effective decisions and plan efficiently.

The National Health Service (NHS) is no exception and improving performance must be the central concern of any national plan. Performing well should mean improving quality, not simply productivity (Dixon 2000). As well as the more traditional criteria of performance, such as: adherence to strict budgets, maximisation of patient through-put, and reduction of waiting times for elective surgery, a much broader view of what constitutes health system performance should be considered, which include patient satisfaction and clinical quality.

A key challenge to implementing this policy is to integrate the top-down instruments of performance management (standards, priorities and accountability) with a system of clinical networks (professional concern with clinical quality, patient focus, peer review and continuous improvement) (Smith 2002).

Various components of quality of care have not been compared with one another. Campbell et al (2000) describes the following philosophical concept:

“is a user who receives good access but ineffective care, receiving better or worse care than a user who has difficulties accessing effective care?”

(pp. 1162)

Such questions are important for measuring, as opposed to defining, quality of care and whilst these highlight often potentially irreconcilable differences between different stakeholder perspectives, they will provide a more accurate reflection of patient-centred care.

Similar methods in similar contexts may produce different frameworks suggesting that internal validity doesn't guarantee reproducibility across other studies. The reasons for this may be numerous; one of which could be the experience and perspectives of the staff. For example, the attitudes of medical staff are driven by cost, clinical significance, and privacy; those of managers by minimising the number of indicators while maximising utility, and data managers and statisticians are concerned with the precision and bias of the measurements (Gibberd 2005).

Freeman's review (2002) discusses two principle uses of performance indicator systems used to improve health care quality in the public sector:

i. ***Summative mechanisms***

For external accountability and verification (Davies 1998, Rissel et al 1998, Smith 1995) – Often used to inform political debate (Smith 1995) and enable governments to impose a policy agenda on organisations by embedding assumptions related to goals and values into selection and structure of indicators (Jacobs and Manzi 2000). The features associated with this approach are summarised in table 2.2 under assurance and accountability.

ii. ***Formative mechanisms***

For internal quality improvement (McGlynn 1998, Goddard et al 1999) and as a focus for feedback and learning, leading to improvement (Schryve 1995) and acting as a vehicle to align the objectives of staff and the organisation (Wyszewianski 1988). The features associated with this approach are summarised in table 2.2 under improvement.

Carter et al (1992) groups performance indicators into three types:

- i. Prescriptive – which show achievement against progress such as in assurance systems. Data precision is crucial and assessed empirically in order to attain the *truth*.
- ii. Descriptive – which record changes, provide a provisional or *partial truth* and often acting as a starting point for discussion between stakeholders.
- iii. Proscriptive which specifies what should not happen.

A summary of the different types and uses are shown in table 2.2.

Table 2.2: Types and uses of performance indicator systems (Freeman 2002)

	Assurance/Accountability – Summative Mechanisms	Improvement – Formative Mechanisms
Emphasis	Verification and assurance – measurement oriented	Learning to promote continual improvement. Change oriented.
Rationale	Provide external accountability and renew legitimacy	Promote change and improvement in care quality.
Culture	Comparisons in order to make summative judgements on care quality. League tables. Blame and shame.	Comparisons have a formative emphasis to learn from differences between providers and encourage improvement. Informal benchmarking to promote discussion and change.
Precision	High precision. Use of statistics to identify ‘real’ differences.	Lower precision.
Epistemology	Empirical. Statistical validity and reliability important.	Interpretive. Use of other data sources and local information to provide context.

2.4 Examples of Performance Management Systems

Johnson and Kaplan (1987) demonstrated some of the deficiencies of former management accounting models highlighting the failure of financial performance measures to reflect changes in the competitive circumstances and strategies of modern organisations. The subsequent revolution in performance measurement, prompted organisations to implement non-financial measures that appropriately reflect their objectives as well as financial measures that indicate the bottom line result (Kennerley and Neely 2002).

Purcell et al (2010) reported on the use of a peer review system for evaluating performance in non-profit organisations demonstrating improved benefits such as improved problem solving, analysis, policy development and reflection of performance at an individual level.

Keegan et al (1989) proposed a performance measurement matrix reflecting the need for balanced measurement, incorporating 'cost', 'non-cost', 'external' and 'internal' dimensions which enabled measures to be plotted and identified where focus needed to be adjusted.

Wang Laboratories (Lynch and Cross 1991) developed a performance management framework known as the SMART (Strategic Measurement and Reporting Technique) pyramid which incorporated internal and external measures as well as adding the concept of a cascade mechanism which enabled measures to be used at an operational level to reflect the corporate vision.

Fitzgerald et al (1991) defined performance measures in two categories: results based measures such as competitiveness and financial performance and measures that focus on the determinants of those results such as quality, flexibility, resource utilisation and innovation.

Brown (1996) developed a performance model which was based on the notion of linking measures through cause and effect relationships. This was known as the Macro Process Model of the Organisation which linked five key stages in a business process: inputs, processing system, outputs, outcomes and goals and their respective measures of performance.

The most popular of the performance measurement frameworks was the balanced scorecard (BSC) developed by Kaplan and Norton (1992; 1996a) which integrated four different aspects of performance which included: financial measures, customer experience, measures that focused on internal business, innovation and learning. Although the BSC reflected many of the attributes of other measurement frameworks it more explicitly linked measurement to an organisation's vision and strategic objectives. Despite its popularity and widespread use, the BSC had several limitations: it didn't include a competitiveness dimension (Neely et al 1995), a human resource perspective was lacking (Brown 1996) and it did not reflect the different aspects of performance used in the SMART pyramid model (Lynch and Cross

1991). Other limitations of the balanced scorecard approach were that it assumed full commitment from management staff to implement the evaluation and the role for frontline staff was limited (Bozo 2000). Greiling (2010) suggested that the system was used as a measurement tool rather than a management framework due to the top-down implementation nature of the approach.

The Business Excellence Model (BEM) took a broader view of performance which involved subjective self-assessment rather than an objective measurement framework (Kennerly and Neely 2002).

The Performance Prism (Neely and Adams 2001) was a multi-faceted framework which adopted a stakeholder centric view of performance measurement which included not only shareholders but other key stakeholders such as: investors, customers, employees, suppliers, regulators and pressure groups. Communication, measurement, capability and stakeholder contribution were key elements of this framework.

Other approaches to performance management included programme evaluation that considered whether activities were being delivered as intended and whether outcomes and goals were being achieved. Hofer (2000) and Fine et al (2000) found that whilst evaluation was an important technique, the design must be robust in the first instance or the credibility and subsequent results could be significantly compromised.

Outcome monitoring which involved data collection, analysis and reporting along with reviewing achievements against outcomes was a further approach which has been used to measure performance; however it is essential that organisations had the internal capacity to and sophisticated collection methods required for outcome measurement (Bozzo 2000).

The Performance Measurement Matrix (PMM) provided a comprehensive map of measures in a framework that identified omissions or a need for greater focus (Kennerly and Neely 2002). The Tableau de Bord along with the work of Bititci et al (1998) demonstrated that performance measures should be integrated across the organisation's functions and through its hierarchy, encouraging congruence of goals and actions.

In health care different approaches and frameworks have been developed in defining performance such as the structure-process-outcome framework developed by Donabedian (1980) and the concept mapping approach described by Nabitz et al (2005) where concepts were grouped into categories and scored in terms of importance.

2.5 Features of Performance Management Systems

Performance management systems should possess key features to be successful and demonstrate desired outcomes. This is considered in the context of the principal-agent theoretical framework and its underlying assumption of *goal alignment*. Most of the literature on performance management in the public sector is predominantly from the UK and the US, both considered as leaders in the use of performance management systems (Propper 2003). The suite of indicators used to reflect an organisation's performance must provide a balanced view of the business (Keegan et al 1989; Kaplan and Norton 1992). The system should reflect financial and non-financial measures, internal and external measures, and efficiency and effectiveness measures. The framework has to provide a succinct overview of the organisation's performance and must include multi-dimensional measures which are a reflection of an organisation's success (Kennerley and Neely 2002).

Performance measurement systems used should use internal, realistic measures that reflect an organisation's day-to-day business and identify areas for improvement. The performance framework should be developed for strategic planning purposes and not primarily as an *accountability tool* and there has to be consensus between stakeholders in agreeing the performance indicators (Greiling 2006). To be effective, performance measurement needs to be sustained and consistent over long periods. It is argued that the short-term political cycles, political processes and determination of politicians to gain quick advantages will always undermine such aspirations (Talbot 2005).

Kravchuk and Schack (1996) suggest ten design principles for a performance management system which include the development of a clear and concise mission with an explicit measurement strategy. Key users must be involved in the design stage with multiple suites of

measures used for multiple users. Adequate detail must be available to those users. Measures should be reviewed and revised periodically over time, taking care to avoid information overload. Strategic and operational complexities need to be considered throughout the process ensuring that service users continue to be a priority. Table 2.3 provides a summary of Kravchuck and Schack's (1996) ten design principles for performance management systems.

Table 2.3: Ten design principles for performance management systems (Kravchuck and Schack 1996)

i.	Develop a measurement strategy which is explicit
ii.	Ensure key users are involved at the initial design stage
iii.	Ensure the framework is rationalised and precludes to measurement
iv.	Ensure multiple suites of measures are used for multiple users.
v.	Always consider the service users throughout the process
vi.	Ensure adequate detail is available to all users
vii.	Ensure measures are reviewed and revised periodically over time
viii.	Consider complexities at strategic (upstream), operational (downstream) and laterally within the organisation
ix.	Avoid information overload
x.	Develop a clear and concise mission

Performance measures must be sufficiently flexible to enable adjustment for local economic conditions and risk to avoid dysfunctional behaviour. Measures should consist of a range of indicators relating to key objectives and outcomes that can be used to assess achievement. Pilot schemes should be tried in advance of full implementation to evaluate their impact and ensure information is accurate and reliable particularly if being released into the public domain (Propper 2003).

When applied to healthcare performance indicators are only meaningful if they are markers of outcomes or processes that are under the influence of clinicians (McKenzie and Shilling 1998). They should not be used in isolation but be integrated into everyday working practices as part of clinical and management processes and in the wider organisational culture (Flynn 1986).

2.6 Problems with Performance Management Systems

While there are many reasons to develop and implement performance management systems there are a number of counter-arguments which must also be considered such as distortion, exclusion, misinterpretation and manipulation of data along with high transaction costs and employee demoralisation (Talbot 2005). These counter-arguments and problems associated with implementation of successful systems act as barriers to achieving goal alignment in the context of the principal-agent theoretical framework.

In complex organisations such as those operating in the public sector, it is likely that multiple performance management systems (PMSs) will be required to achieve successful strategic control. However the performance management function will result in diverting resources away from *front line* services therefore should operate only if necessary and complementary to each other in achieving the strategic goals of the organisation (Simons 2000). Despite the performance measures now being widely used within the public sector there remains a lack of evidence over their usefulness and whether organisations actually achieve the goals set by policy-makers (Propper 2003).

Despite the quality of information being produced in public sector organisations, managers often ignore the output of performance management systems (PMSs) due to information overload and wasteful bureaucracy (Radnor and McGuire 2004). Although there is justification for public sector organisations needing PMSs, this needs to be balanced with efficient and effective management at the same time as minimising *information overload* and *wasteful bureaucracy*. The latter can arise when multiple types of PMSs are used in an un-coordinated way to meet perceived information needs (Radnor and McGuire 2004).

Although performance assessment frameworks are considered as the quantitative instruments used to monitor the progress of health care, many of these are variable in quality and the coverage is often not comprehensive or adequately balanced (Smith 2002). Strict reliance on explicitly measuring data quantitatively contained in administrative datasets can only measure those elements of care that are consistently and reliably recorded. It is unlikely that data collected for administrative or financial purposes will meet the requirements of data to be used for quality assessment (Campbell et al 2000).

Problems with measuring performance have been reported which include: poor data quality and comparability, cost and collection burden, differing priorities or perspectives among stakeholders, insufficient expertise and most importantly, insufficient linkage with subsequent action (Sheldon 2005). Despite the drive to continually develop more performance indicators, there is little evidence that they have had a positive impact on decision making, improved health service delivery, or health outcomes (Adair et al 2003) and have not convincingly been able to demonstrate their overall impact or value for money (Sheldon 2005).

Freeman (2002) groups reported problems of performance indicator systems into six categories: conceptual issues; technical issues; availability and reliability of data; validity and confounding factors; robustness, sensitivity and specificity of data and promotion of action and change. These are described in more detail in the following sections.

2.6.1 Conceptual, Technical and Behavioural Issues

In assurance-performance indicator systems, quality must not only improve but be seen to do so. Whilst performance measures may be appropriate for monitoring compliance with regulations or comparing realities against a formal plan, they are of less use in understanding how implementation processes have influenced results as they are not capable of showing why particular results are obtained. Baker (1996) emphasises the danger of analysing empirical data to judge performance without looking at the underlying changes in behaviour that effects change. Selecting specific indicators provides only a partial picture of the human experience of healthcare whilst potentially marginalising other aspects that have not been selected to measure. Elkan & Robinson (1998) argue that performance targets can foster complacency on those who have achieved well and defensiveness of those performing badly. Local priorities may be skewed, health inequalities widened and health outcomes may not necessarily be improved.

2.6.2 Availability, Reliability and Validity of Data

Availability of data often results in measuring what there is data for, whether or not this meets the organisation's goals and objectives (McKee and James 1997). Data accuracy is important in reflecting quality of data rather than quality of care (Kazandjian et al 1996).

Data collection relies on the goodwill of clinicians and is thus susceptible to manipulation, particularly when reward and censure depend on results (Audit Commission 2000).

Imposed performance measures that lead to sanctions or rewards can result in manipulation of results, thus encouraging a culture of cynicism and amoral behaviour which can damage public service ethics and beliefs (Talbot 2005). Examples from the literature include: re-labelling A&E patients to meet targets, up-coding of admissions to maximise income and falsifying ambulance response times to meet targets (Hamblin (2007).

Even where data is available and reliable, it can be potentially misleading and easily misinterpreted (McColl et al 1998; Smith 1995). Majeed and Voss (1995) reinforce the limitations of performance measures, providing examples of inaccurate data recording and creation of perverse incentives.

To be valid, indicators need to reflect attributes of the health-care system, rather than attributes of the patient or other variable. For example readmission rates are considered a valid indicator of quality however this may be a reflection in quality of previous care. Because measures and outcomes are affected by other variables it is difficult to attribute variation to performance (Bull et al 1994; Leng et al 1999). Potential confounding factors include configuration of the local health economy (Brown et al 1995), socio-economic variations (Giuffrida et al 1999), case mix, co-morbidity and severity (Rigby et al 2001).

2.6.3 Robustness, sensitivity and specificity of Indicators

Problems associated with robustness of performance indicators include; selection based on weak evidence (Davies and Lampel 1998), small case numbers (Sheldon 1998) and misinterpretation of data (Smith 1995). It is important that indicators can identify all poorly performing units (sensitivity) and that all such units really are performing poorly (specificity). It should be recognised that different circumstances warrant application of different levels of sensitivity and specificity with summative accountability decisions requiring much higher accuracy than formative, developmental ones. While prescriptive indicators provide a starting point for discussion, there is a need to take context and other informal, *soft* data into account (Goddard et al 1999; DoH 2001).

2.6.4 Indicators and unintended consequences

Performance indicators are a poor motivational device for action and change (Mannion and Goddard 2001) and can give rise to perverse incentives and unintended consequences through distortion of behaviour often in unintended ways (Smith 1995). Unintended consequences of public sector performance indicator systems include: Pursuit of narrow, local goals that are short-term and may not align to those of the organisation; manipulation and misinterpretation of data to secure a strategic advantage; and drawing conclusions from raw data can result in unintended consequences. These have been summarised in table 2.4.

Table 2.4: Unintended consequences of public sector performance indicator systems (Smith 1995)

Tunnel vision	Emphasis on phenomena quantified in the measurement scheme
Sub-optimisation	Pursuit of narrow, local objectives, rather than those of the organisation
Myopia	Pursuit of short-term targets
Measure-fixation	Pursuit of strategies enhancing the measure rather than the associated objective
Misrepresentation	Deliberate manipulation of data
Misinterpretation	Drawing misleading inferences from raw performance data
Gaming	Deliberate manipulation of behaviour to secure strategic advantage
Ossification	Organisational paralysis due to rigid performance evaluation

Lack of clarity over the aims of an indicator system (assurance or quality improvement) will inevitably lead to problems over ownership of data and disputes over meaning and proper use. A problem with the use of *outcome rates* as indicators is that they provide no indication of what, if any, action is appropriate to improve health care (Freeman 2002).

2.7 Use of sanctions and rewards in the public sector

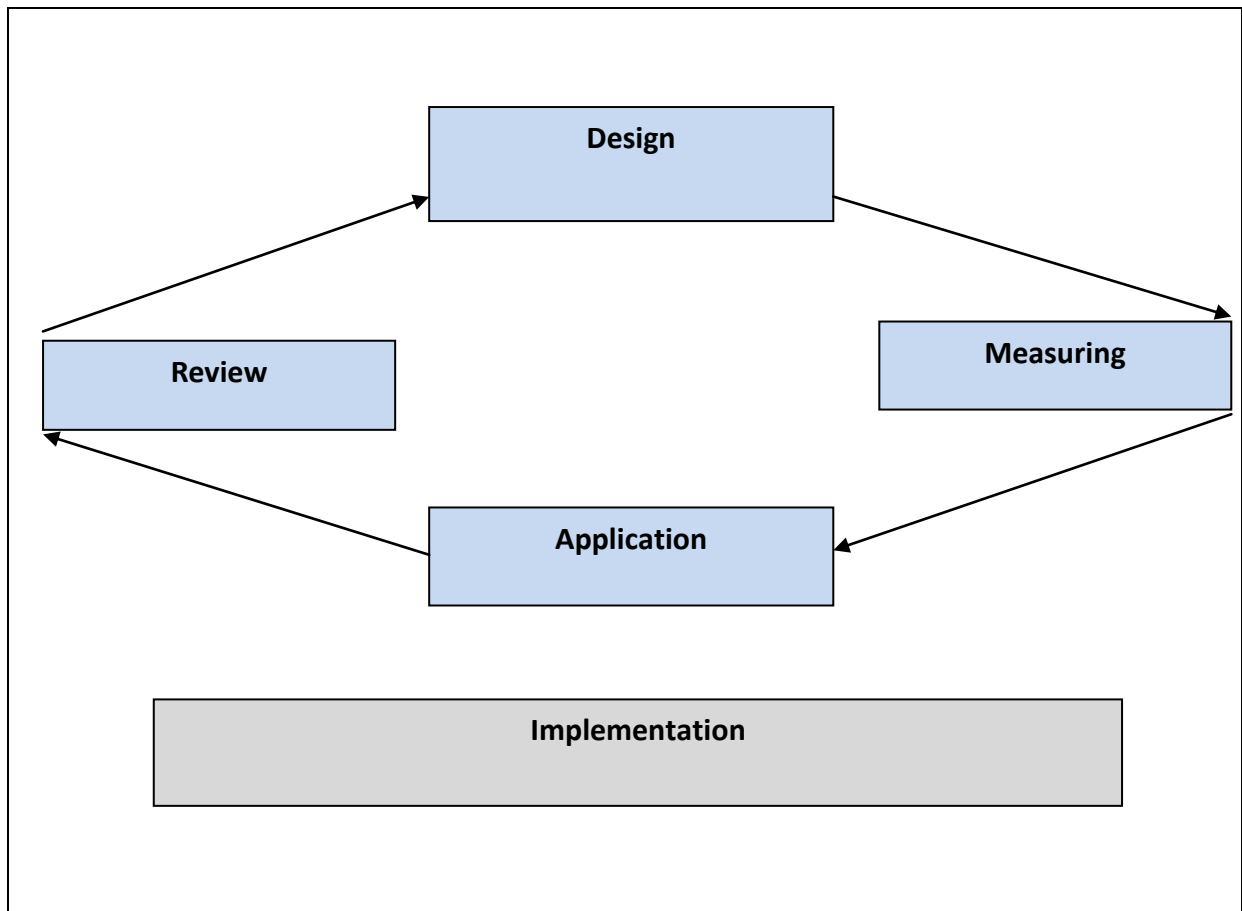
Use of incentives is an important element of performance management and is an important feature of principal-agent theory with regard to achieving goal alignment. The following section will review the literature on sanction and reward mechanisms. Although achieving desired outcomes and goal alignment are the main objectives, barriers often get in the way, preventing achievement of the desired outcomes.

Careful design and implementation of sanction and reward mechanisms to suit particular aspects of an organisation are essential in ensuring the success of a scheme. A review commissioned by the National Audit Office (NAO) in 2008 helped to inform the understanding of the use and effectiveness of sanction and reward mechanisms in the UK public sector.

A four stage model is used to explain the different phases required for a successful scheme. The initial design stage involves determining the types of parameters, values and subject of the sanction/reward scheme. The second stage is where the data systems used to measure performance against the pre-determined parameters are developed. The application stage involves applying the system to the defined parameter and the system is evaluated in the review stage. Implementation is where the sanction/reward is rolled out and it is during this phase that elements of the earlier stages may need to be revised if the scheme is not delivering the initial objectives.

The four stage approach is demonstrated in figure 2.2.

Figure 2.2: The four stages of a sanction/reward mechanism (NAO 2008)



There is no standardized design for sanction and reward schemes. To be effective mechanisms need to be carefully tailored to local requirements. Design characteristics that can be applied when designing successful systems of rewards and sanctions have been reported by the National Audit Office (2008). These are included at the beginning of the chapter to help frame the rest of the section on incentives and rewards and are summarized in table 2.5.

Table 2.5: Design features that facilitate effective sanction and reward systems (NAO 2008)

DESIGN FEATURE	
i.	Ownership - Joint development with the agents and relevant stakeholders to ensure consensus of views, achievable and relevant targets appropriate targets tailored to local circumstances and to avoid potentially conflicting goals.
ii.	Right measure - Ensure the right performance measure is incentivised to avoid perverse incentives.
iii.	All aspects of performance - Measure all aspects of performance not just those that are easy to measure to avoid focusing on some objectives at the expense of others using a range of measures whilst ensuring the number of targets set is manageable
iv.	Outcomes - Ensure that the measured, intermediate, outcome leads to the overall desired outcome
v.	Control – Ensure outcomes are incentivized which can be sufficiently influenced by the agent’s actions
vi.	Motivation – Ensure schemes are designed to allow for and incentivise the possibility of different types of motivation
vii.	Teams – Where outcomes are dependent on teams ensure schemes are developed to facilitate this
viii.	Adequate reward – Ensure rewards are sufficient to incentivize behavior
ix.	Data – Ensure schemes utilize good quality, reliable data
x.	Review and application issues – Ensure schemes allow for revisions over time where outcomes are not being achieved

2.7.1 Ownership and influence over desired outcome

Desired outcomes of a successful sanction/reward scheme should be sufficiently influenced by actions of the agent to ensure that change in behavior or practice of the agent will have an impact on the desired outcome. This will subsequently lead to increased motivation and high standards of performance. Incentivizing outcomes for sources of variation, incentivizing on improvement rather than against peers, and incentivizing aspects of performance over which

the agent has more control can help achieve organisational objectives. Ensuring sanction/reward schemes are directed at the correct organisational level is important so that the agent delivering the outcome is adequately incentivized. This approach can improve the influence and control over desired outcomes (Marshall et al 2000).

Development of sanction/reward mechanisms should involve key stakeholders from the outset to provide consensus and mitigate problems associated with multiple principals with multiple, potentially conflicting goals. Locke (1968) argues that involving employees in agreeing objectives and designing incentive programs is more likely to result in a greater commitment and motivation towards achieving mutually agreed goals. Allowing agents to have some degree of control of the sanction/reward mechanisms ensures that the targets set are achievable and relevant locally (NAO 2008).

While sanction and reward schemes have to be affordable, the value of the sanction or reward needs to be sufficient to motivate agents to the desired behavior (Prentice et al 2007; Makinson 2000). Inappropriately valued incentives are one of the main reasons sanction/reward mechanisms fail (GAO 2006). Monetizing the costs and benefits of a scheme can determine an appropriate cost effective level of a sanction or reward.

2.7.2 Measure all aspects and incentivise the right measure

A successful sanction/reward mechanism should capture all aspects which contribute to the overall outcomes otherwise some objectives, often those associated with the greatest value, will be focused on at the expense of others. Tasks that are explicitly rewarded tend to receive more attention, which are often those easily measured rather than tasks that are most valued. This can result in re-direction of resources from other valuable activities. Focussing on individual measures may discourage more unified quality improvement efforts that ultimately could prove more effective or efficient (Rosenthal et al 2004).

A range of indicators that combine financial performance with other measures of performance should be adopted (Makinson 2000) that relate directly to the organisations objectives (Kaplan and Norton 1992). However, caution should be applied to ensure that the total number of performance targets and measures are kept to a manageable level. Makinson (2000) suggests a maximum of five targets in an incentive scheme for junior staff and a maximum of eight for senior staff.

Poor performance indicators can lead to inappropriate strategic behavior among agents and possible perverse incentives (Kerr 1975). In the public sector where decision-makers exist at various levels within an organisation, outcomes can be very difficult to measure (Burgess and Ratto 2003) and the multiple tasks expected from public sector workers mean that effort is likely to be focused on tasks being assessed at the expense of other important issues. Kelman and Friedman (2007) describe the possibility of addressing the risks associated with gaming and inappropriate strategic behavior. They use the concept of ensuring effort required to achieve the measured target enhances rather than substitutes for other desired (but unmeasured) activities.

2.7.3 Measured outcome leads to overall desired outcome

In any successful sanction/reward scheme; measured, intermediate outcomes should lead to the overall desired outcome. Although short-term outcomes can easily be measured and show benefits they should also demonstrate a clear correlation with positive long-term outcomes (NAO 2008).

When selecting an intermediate outcome measure, potential gaming by agents should be considered or the principal runs the risk of not achieving the overall desired outcome despite achieving the intermediate outcome. For example, Smith et al (2005) found that surgeons delayed placing patients on waiting lists following consultations to improve waiting time performance; Jacob (2007) showed that a test-based accountability policy introduced into schools led to an improvement of maths and reading test scores rather than an improvement in actual student learning; Peterson et al (2006) showed that incentive schemes improved documentation rather than a change in quality of health care delivered to patients.

‘Cream-skimming’ is a term used when people with high levels of target outcomes are selected by agents, rather than those who would benefit most. This often occurs where differences between users are not considered when measuring outputs. Examples of such activity have been demonstrated in education where anecdotal evidence from the UK suggests that weaker pupils are encouraged by schools to sit for vocational exams rather than GCSE courses (Wilson and Piebalga 2008) and grammar schools select higher performing pupils through achieving a particular level on entrance examinations. In health, Besley and Ghatak (2003) make reference to competition for the healthiest customers by health providers and nursing homes. Leventis (1997) highlights refusal of New York cardiac surgeons to

operate on risky patients once their mortality rates came close to a certain threshold. Adjusting outputs to take into account individual or area-specific characteristics can help mitigate the action of cream-skimming.

Reported studies provide evidence of unintended consequences resulting from implementation of pay-for-performance programmes such as: miscoding of diagnoses (Wynia et al 2000), *up-coding* hospital discharges to increase reimbursements (Carter et al 1990), the differential attraction of healthy patients over those at greatest need (Newhouse 2002), and denial of surgery to high-risk patients (Hannan et al 1997).

High intensity sanction/reward schemes where compensation strongly depends on performance are less suited to systems where multiple objectives or situations where outcomes cannot be easily specified or measured (Prentice et al 2007). Ineffective incentives or inappropriate strategic behavior such as the misallocation of effort by agents is likely to result in situations such as this. Theory suggests that lower intensity sanction/reward schemes should be used, such as softer operational or reputational schemes where only a limited proportion of compensation is tied to performance (Burgess et al 2005b).

Although more complex to implement, combining objective performance measures with subjective performance appraisal within a sanction/reward scheme may help to overcome the obstacles of measuring outcomes (Prendergast 1999). A clear correlation between input, process and a desired outcome has been used in some limited cases (Marshall et al 2000).

2.7.4 Motivation, Teams and Incentives

A mixture of intrinsic public-spirited and self-interested motivation is likely to be present in public sector agents (Armstrong 1999; Le Grand 1995). Prior to the NHS reforms of 1991, to defer workload and costs, GPs had a material incentive to refer patients to others for treatment rather than providing treatment themselves. Even when referrals were appropriate, there was still an institutional flaw as GPs had little interest in economising on their patients' use of outside medical resources (Hausman and Le Grand 1999). However in practice, GPs were constrained to some extent from over-referring and over-prescribing by a number of factors including: maintaining favourable relations with the local consultants, impact on their own self-esteem and potential long waits for treatment.

Where self-interest is dominant within an agent and intrinsic motivation is weak, high intensity sanction or reward mechanisms will be required to achieve the desired outcomes. (Kreps 1997). If intrinsic motivations are prevalent and agents are very risk-averse, lower-intensity incentives such as operational or reputational incentive schemes are likely to be more effective than high-intensity financial incentives where a large proportion of compensation is linked to performance. Schemes should be designed to allow for both types of motivation and consideration of the agent's attitudes towards risk (NAO 2008). Influence over an outcome is often only available at the level of the team rather than at the level of the individual agent, particularly in the public sector (Makinson 2000) as demonstrated by Burgess et al (2005) on evaluating the introduction of Makinson's recommendations on the use of incentives in HM Customs and Excise teams. Team level sanction/reward mechanisms have increased in popularity over recent years in various public sector groups including: police, armed forces, judiciary, healthcare workers and teachers (Prentice et al 2007). A problem associated with team incentives is the issue of *free-riding* which results in individual agents from a team feeling they contribute inadequate influence over the outcome and thus are tempted to let others do the work for them (Holmstrom 1982). Burgess et al (2005b) explains that *free-riding* becomes an increasing problem as teams increase in size as it becomes easier for individuals to disguise their lack of contribution. *Free-riding* can be reduced using peer pressure particularly in smaller teams where individuals can observe and monitor each other's effort (Kandal and Lazear 1992). Team-based measures may also contribute to retaining intrinsic motivation within an incentive scheme by maintaining the collaborative ethos of a public sector organisation that focuses less on individual financial gains or achievements (Makinson 2000).

2.7.5 Measurement and Application Issues

A successful sanction/reward scheme relies on good quality, reliable data as well as adequate systems of data collection on the selected measures to ensure that data collected is robust, transparent and clearly defined (NAO 2008). Sanction/reward mechanisms should be reviewed frequently to assess the effectiveness of the scheme and allow any necessary amendments for design flaws and changing needs over time (Government Accountability Office (GAO) 2006). The most accurate way of measuring the success of an incentive scheme is to assess what the outcomes would have been in the absence of the scheme (NAO

2008). However, measuring the impact of a particular sanction/reward scheme is often difficult as the majority of schemes tend to be introduced due to multiple changes in policy, rather than on a controlled trial basis (Burgess et al 2002). Drawbacks of undertaking an assessment of effectiveness involving a counterfactual include: expense, time-consuming nature, technical expertise and the moral objections to introducing a scheme on a trial basis if believed to substantially improve performance (NAO 2008).

Sanction/reward schemes must be consistently applied and awarded as planned to ensure credibility, maintain motivation of agents and ensure that agents recognize their additional efforts are worth the costs and risks involved (GAO 2006). Rosenthal et al (2004) indicate that most incentive schemes utilise a mixture of process and structural measures with a smaller role for indicators relating to patient experience. Rewarding providers according to attainment of a pre-determined level of performance or according to improvement is an area of controversy as it places historically good performers at an advantage as they are rewarded for past efforts. It does however conflict with the objectives of most organisational programs which generally involve improving quality for all beneficiaries. Although paying according to level of performance is the most common, it has come under criticism as providers who have historically performed well and exceeded proposed targets have no motivation or incentive to improve because they can receive the reward for simply maintaining their current position (Rosenthal et al 2004). More importantly, poor performing providers who fall significantly below the proposed target are likely to be de-motivated and have weak incentives to improve their performance when the target appears to be unrealistic with a resulting redistribution from 'low-quality' to 'high-quality' providers. It is often the poorer performing providers that require additional resources to improve their quality and as such it can be argued that incentives should be structured around quality improvement in order to bring up average quality and reduce variance across providers. Conversely, rewarding providers based on improvement may de-motivate and disengage the best providers for improvement is likely to be substantially more difficult because of ceiling effects (Rosenthal et al 2004).

Design of a sanction/reward schemes piloted through phased implementation approaches allow time for data systems and knowledge to be developed and adjustments to be made in advance of full roll out of the program (NAO 2008). Armstrong and Murlis (1998) argue

that hasty implementation of a scheme is often responsible for its failure. Pilot schemes can help overcome some of these difficulties (Armstrong and Brown 2001).

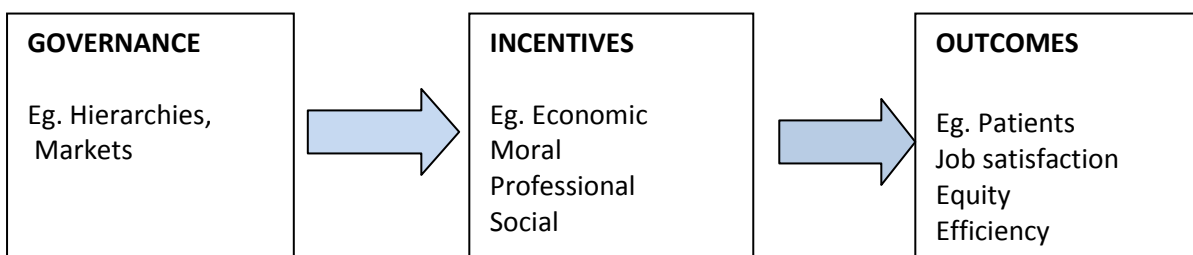
2.7.6 Strategic approach across a range of factors

Whilst aligning providers' financial rewards with an organisation's strategic and quality objectives may lead to improvement, it is probably not sufficient in isolation. Rosenthal et al (2004) explain the rationale behind the need for quality-incentive programs to form part of a wider strategy. This involves promotion of health care quality through: measuring and reporting performance; providing technical assistance; using evidence-based guidelines; and giving customers' incentives to select higher-quality providers and proactively manage their own health.

Davies et al (2005) discovered that different governance and incentive frameworks have a significant impact on outcomes in health and social care. However, the complex nature of these inter-relationships often due to social and political factors means that the link between governance, incentives and outcomes are rarely straightforward. A Governance-Incentives-Outcomes (G-I-O) model was developed to help managers and policy makers understand the relationship between these three factors in a more systematic way.

The G-I-O model is summarised in figure 2.3.

Figure 2.3: The G-I-O Model (Davies et al 2005)



Davies concludes that no single governance structure predominates at all levels and the evidence suggests that the links between the three variables alluded to in practice is weak.

2.7.7 Pay-for-Performance in Healthcare

Pay-for-performance (P4P) is increasingly being implemented in the healthcare system to encourage improvements in healthcare quality. P4P is a payment model that rewards healthcare providers for meeting pre-established targets for delivery of healthcare services using financial incentives. Despite broad international experience with pay-for-performance systems, evidence of its impact and effectiveness on achieving health outcomes is limited (Wilson 2013; de Bruin et al 2011; Emmert et al 2012; Wright 2012; Mullen et al 2010) and tends to impact on improvements in provision and structure (Wilson 2013) and clinical processes rather than health outcomes (Peckham and Wallace 2010). A general theme emerging from the literature on pay-for-performance schemes is the need for more high quality research to inform decisions about how pay-for-performance programmes should be structured to maximise improvements in health outcomes and equity (Wilson 2013; de Bruin et al 2011; Emmert et al 2012; Wright 2012; Steel and Willems 2010). Although schemes can have a positive impact on incentivised clinical processes, it is not clear that this translates into improving the experience and outcome of care (Peckham and Wallace 2010).

The majority of research on pay-for-performance schemes has been undertaken in the UK (Campbell et al 2009; Doran et al 2006; 2011; Roland 2004; Sutton et al 2012; Ryan and Doran 2012; Fleetcroft et al 2012) and the US (Werner et al 2011; Mullen et al 2010; Epstein 2006; Epstein et al 2004; Rosenthal et al 2005). However despite the lack of research to either support or deny their effectiveness in motivating improved quality and cost-effectiveness on healthcare (Rosenthal & Frank 2006) and despite concerns over their unintended consequences, pay-for-performance schemes continue to be introduced. Findings from Hillman et al (1998) suggest that there was no performance improvement on complying with cancer screening guidance, nor did incentivising providers provide any improvement on paediatric immunisation uptake (Hillman et al 1999). Although Kouides et al (1998) demonstrated that immunisation rates improved from baseline compared with control, Fairbrother et al (1999) showed that neither feedback nor enhanced remuneration improved the likelihood of uptake of the childhood immunisation programme. Financial incentives have shown improvement from baseline in uptake of influenza immunisations and Roski et al (2003) demonstrated improved documentation of smoking cessation status and

advice to quit in comparison with the control group, however despite such interventions the impact on smoking cessation rates was insignificant.

Incentivised quality programmes which have been developed and implemented in various non-profit healthcare organisations over the last decade or so include: Medicare and Medicaid in the US where data is publicly reported and the highest ranking hospitals receive a bonus for achieving targets in patients with the targeted clinical conditions (Becker 2003). The performance of the hospitals in the project initially improved more than the performance in the control group, however after five years, the two groups' scores were virtually identical with improvements being largest among hospitals eligible for larger bonuses, were well financed, or operated in less competitive markets (Werner et al 2011). A similar scheme called Advancing Quality was introduced in all NHS hospitals in the North West of England in 2008 which was associated with a clinically significant reduction in mortality (Sutton et al 2012). Other incentivised programmes include: childhood immunisations, chronic-disease management, cancer screening, and patient satisfaction programs (Fong 2002); use of computerised technology to reduce medical errors (Freudenheim 2002) and development of clinical information systems and patient education schemes to improve review rates of patients with long term conditions (Kowalczyk 2002).

In New Zealand, the gap between target and actual performance persists despite quality improvement initiatives. Examples of such initiatives include: the professional requirement of vocational registration of general physicians; the option volunteer system for practice accreditation; and the development of new payment mechanisms to providers (Buetow 2008). In 2004 a new pay-for-performance contract for general practitioners was introduced to improve quality and standardise care in England. A longitudinal cohort study published by Cambell et al (2007) measured the quality of primary care in three chronic conditions (asthma, diabetes and coronary heart disease (CHD)) before and after the Quality and Outcomes Framework (QOF) was introduced, to assess the impact of the incentive framework. Using care reported in the medical records, the results suggest that for diabetes and asthma there was a modest improvement of care however, caution is noted that pay-for-performance schemes tend to promote improved recording of care rather than actually delivering better care. Improvement rate between the clinical indicators before and after the

introduction of the QOF demonstrated no significant difference. Although the study was not designed or powered to support the claim, it suggests that the pay-for-performance program may not necessarily be responsible for improved outcomes between 2003 and 2005. Neither did the study provide information on the effects of financial incentives on the care of conditions to which no financial incentives were attached. A further study by Campbell et al (2009) found that once targets were reached, the improvement in the quality of care for patients with particular chronic conditions slowed, and the quality of care declined for two conditions that had not been linked to incentives. Doran et al (2011) found that improvements associated with financial incentives were achieved at the expense of small detrimental effects on aspects of care that were not incentivised. Fleetcroft et al (2012) analysed a subgroup of indicators to assess whether or not they were aligned to maximise health gain. The disconnection between incentive and health gain risks supporting clinical activities that are only marginally effective, at the expense of more effective activities receiving lower incentives. When designing pay-for-performance programmes, decisions about the size of the financial incentive associated with an indicator should be informed by the impact on health gain expected of that indicator (Fleetcroft et al 2012). Information on both baseline performance and population health gain should inform decisions about future selection of indicators for pay-for-performance schemes (Fleetcroft 2010).

Gillam et al (2012) found that observed improvements in quality of care for chronic diseases in the framework were modest, and the impact on costs, professional behaviour, and patient experience remain uncertain. This suggests the need for further research into improving quality across the different domains, while minimizing costs and any unintended consequences. Although Ryan and Doran (2012) recognised that the effects of the QOF were modest at practice level, process improvements appear to have led to improvements in population health. Gravelle et al (2007) examined the extent to which the proportion of prevalent patients for indicators within QOF were achieved (quality delivered). This was tested for potential gaming of exceptions and whether reporting of prevalence was actually responsive to financial incentives. Findings suggest that in the majority of GPs, partial altruism exists as markedly higher quality than required maximised financial rewards.

A number of studies exploring the impact of the Quality and Outcomes Framework (QOF) on health inequalities have been carried out with conflicting findings. Spearhead Primary Care Trusts (PCTs) were identified as those having the lowest life expectancy and poorer outcomes related to levels of deprivation and unmet need. These PCTs received additional resources for interventions such as: health trainers, smoking cessation services and school nurses. Dixon et al (2012) found a lack of difference between the most deprived practices in Spearhead and non-Spearhead PCTs suggesting that area-based initiatives to tackle inequalities had not had an observable impact on deprived practices with unobservable factors explaining most of the variation in achievement. Boeckxstaens et al (2011) describes the evolution of pre-existing inequity in health care after the introduction of QOF. The equity dimension of QOF might be refined using alternative strategies. Introducing different targets for specific patient groups with patient-centred indicators to grasp the complexity of primary care is one example. Evaluating pay-for-performance initiatives in broader health systems impact assessments with equity as a full assessment is another example (Boeckxstaens et al 2011). Addink et al (2011) found that following the launch of QOF, practices with higher deprived populations or those with a high ethnic minority were perceived as offering worse access and were less likely to achieve improvements. Alshamsan et al (2010) found that inequalities in chronic disease management have largely persisted following the introduction of QOF and recommends that pay-for-performance programmes should be designed to reduce inequalities as well as improving the overall quality of care. Dixon and Khachatryan (2010) stress the importance of aligning performance indicators within QOF to the objective of reducing inequalities. Additional research is required to understand whether the QOF ensures those most difficult to reach with greatest care needs are getting access to high quality primary care and whether this will subsequently reduce health inequalities. Ashworth et al (2007) identifies shortfalls in some specific clinical and non-clinical QOF indicators, suggesting that focussed interventions could be applied to improve the quality of primary care in deprived areas.

The Quality and Outcomes Framework (QOF) in the NHS has been referred to as a shift from trusting health care professionals to deliver high standards of care to their patients towards a more active form of performance monitoring (Checkland et al 2004) with increased surveillance and monitoring having a negative effect on motivation (Gagne and Deci 2005).

However, McDonald et al (2008) found that clinical opinion of the new contract was largely positive with no perception that control and autonomy was being removed from them as general practitioners. A variety of explanations could be responsible for this finding, one of which might be the ability to use the contract to impose opinions on others relating to service delivery. Another explanation might be the improved recording of information through use of standardised templates. Recognition of good practice, support from the profession in negotiating the new contract and reluctance of less enthusiastic GPs to express reservations in an environment where the majority are supportive (McDonald et al 2008) are all further explanations that may account for this perception. Although nurses were generally supportive of the new system, in smaller practices there was less enthusiasm for the top-down surveillance approach which some considered to be less patient-centred. However, in larger practices the nurses considered the contract as an opportunity to improve quality by aligning the contract targets with their own personal goals and improved outcomes for patients (McDonald et al 2008). It was the most junior members of the practice team (Health Care Assistants) who appeared least satisfied with the new contract arrangements. Here it was perceived that rewards were not a reflection of expended commensurate effort, potentially carrying the risk of reducing good will and effort. McDonald et al (2008) suggests that practices may need to consider the perception of *fairness* more seriously if the advantages of motivation are not to be underestimated. Although recognised that tensions exist to varying degrees within different GP practices, a more top-down, formalised approach could have an adverse effect on staff motivation. Although aims of the QOF had been met with regard to improvements in disease-specific processes of patient care, physician income, and improved data capture, it also led to unintended consequences. These included: emergence of a dual QOF-patient agenda within consultations; potential deskilling of doctors as a result of the enhanced role for nurses in managing long-term conditions; a decline in personal/relational continuity of care between doctors and patients; resentment by team members not benefiting financially from payments; and concerns about an ongoing culture of performance monitoring in the United Kingdom (Campbell et al 2008).

Campbell et al (2008) found that it wasn't necessary to align targets to professional priorities and values to obtain behaviour change, although doing so enhances enthusiasm and understanding. Other evidence suggests that for financial incentives to be successful in terms

of influencing the behaviour of professionals, performance measures and respective rewards need to be aligned to the values and beliefs of staff being rewarded (Marshall and Smith 2003; Spooner et al 2001). Other than professional motivation, Campbell et al (2005) describes a combination of factors which play an important role in sustained improvement in quality of care. These include: working well together as a team; establishing clear and consistent goals; and having effective leadership. Gosden et al (2001) and Epstein et al (2004) suggest that financial rewards can motivate professionals to change their behaviour. Asch et al (2004) demonstrated that in areas where performance measures and ongoing monitoring are established, patients tend to receive higher quality care. A reduction in continuity and potential fragmentation of care has been a concern expressed by some resulting in a neglect of conditions which have not been financially rewarded (Roland et al 2006). Although financial incentives can contribute to improving quality particularly if part of a comprehensive, standardised programme, it has been suggested that the gains in quality after introduction of the QOF, could have been achieved at a lower cost. In more recent years payments have been revised in accordance with higher thresholds, new targets and new disease areas (Campbell et al 2007).

Rosenthal et al (2005) evaluated the impact of a physician financial reward scheme based on three quality measures including cervical cancer screening, mammography and Haemoglobin A1c (HbA1c) testing. Changes in clinical quality, size of the financial reward and distribution strategy of the incentives were considered. The analysis suggested that although quality of care improved for all 3 indicators, in only one measure was the improvement greater in the incentivised intervention group. The greatest improvement was seen in the lowest performing physician group compared with physician groups that had previously achieved the targeted level of performance who improved the least. One explanation of these findings may be down to the higher performers at baseline recognising that they would only need to maintain their current position to receive their incentive payment. The lower performers at baseline less likely to receive the reward led to the more surprising result where these groups improved the most. This suggests that financial reward schemes can improve performance in both high and low performing groups possibly with a greater share of the reward being distributed towards the latter. It is important to achieve an optimal balance of adequately rewarding good and

poor performing groups. This has to be balanced with other factors such as: available resources, patient populations and socio-economic status.

Incentive schemes should be designed to enable alignment of rewards with the values and goals of providers and other key stakeholders. This can be achieved through engagement and constructive dialogue which generates commitment, understanding and respect between individuals and organisations. Clarification and understanding of the operating values and intrinsic needs for competence and autonomy of professionals is essential if financial incentives are to be used to provide extrinsic motivation (Buetow 2008). McDonald et al (2008) challenges whether motivation and clinical autonomy with appropriate performance management techniques can deliver on the objectives whilst maintaining an appropriate level of accountability.

Rosenthal et al (2008) found that health care quality can be improved through negotiation with the provider on an agreed payment (or at least in part) on particular performance measures or workload involved in delivering high-quality care. In healthcare such performance measures requiring both clinician and provider effort are embodied within various process and outcome measures. Commissioners decide on selected performance measures and respective sanctions and rewards. These depend on the magnitude of costs and benefits to the provider of improving quality. Other important considerations are: to ensure that financial rewards are adequate to motivate providers and recognise that quality improvement takes time often requiring investments in infrastructure and human resources (Rosenthal et al 2005).

Vladeck (2004) argues that prior to implementation of any financial reward scheme, savings identified from quality improvements need to be balanced by reductions in reimbursement across the entire system. Consideration must be given to the balance between harm and safety with underperforming agents. System design needs to address whether incentives should be awarded to highly performing providers, to those demonstrating greatest improvement or to those that meet a performance threshold. Developing, implementing and monitoring of pay-for-performance schemes need to be balanced against respective costs and complexity.

There is a need for future research on examining the net (ie.sum of both positive and negative) impact of paying for quality in health care. This will provide an understanding of the relationships between incentive payments and performance, and between incentive payments and unintended consequences. Assuming there is a positive net gain, research should ultimately focus on whether paying for quality is cost effective compared to other quality improvement interventions such as direct subsidies for infrastructure improvements and education programs (Rosenthal and Frank 2006).

There is an argument that professionals should drive the development of performance indicators within healthcare. This will provide professional ownership and commitment and support. Financial rewards for behaviour is important for provider goals and professional identities (Buetow 2008). However, it is also important, to ensure that performance measures are aligned with the values of those commissioning services who hold responsibility for ensuring that quality standards are achieved and hold professionals to account. A conflict exists between these two aspects of performance management with the first focussing on self-regulation and the latter focussing on contract management (Ryan and Deci 2000).

There is a debate over patient involvement in developing and evaluating performance and whether the targets agreed will reflect patient values. Buetow and Elwyn (2007) make reference to the notion of patients co-producing health care through contributing to the development of patient performance standards. Perhaps a more controversial debate is whether patients as well as health professionals should be incentivised to change their behaviour such as stopping smoking, increasing physical activity and losing weight. Evidence from well-controlled evaluations will provide the greatest benefit for supporting commissioners' decision making, however the speed at which health reforms change, presents a significant challenge. Buetow (2008) suggests time series studies that enable performance to be compared at multiple points in time before and after the intervention could offer a significant advantage.

2.7.8 Public Release of Performance Data in Health Care

Although it is increasingly common to release information about performance in health care, its effectiveness in changing behaviour of consumers, providers, purchasers or professionals has not been determined (Ketelaar et al 2011). Most of the literature on public release of performance data is based on studies undertaken in the United States. Three systematic reviews have been carried out by Marshall et al (2000), Shekelle et al (2008) and Ketelaar et al (2011) respectively that consider the public release of performance data and its impact on outcomes and quality.

As governments, regulators, purchaser and provider organisations, health professionals and consumers of health care become more interested in measuring performance using consumer reports and provider profiles, it is not always clear who the information users are or what the release of data is expected to achieve (Smith et al 2009). Information about the performance of hospitals, health professionals and healthcare organisations is released into the public domain to facilitate comparisons of performance over time (Davies and Marshall 1999), among providers, and against standards of good practice (Marshall et al 2000). It is often assumed that the information will change behaviours of various stakeholders and ultimately result in health system improvements (Marshall et al 2000; Berwick et al 2003; Smith et al 2009). The lack of agreement and diverse aims associated with public release of data have made it difficult to identify evaluation criteria that can be used to assess its impact and thus has led to a failure to justify publishing information (Marshall et al 2000).

Performance information has only a limited impact on consumer decision making. The reasons for consumers' lack of interest in and use of performance data include: Complexity of performance data (Hibbard et al 2010), difficulty understanding and using information (Hibbard et al 2001; Magee et al 2003; O'Meara et al 2005; Peters et al 2007; Hibbard et al 2007; Jewett and Hibbard 1996; Hibbard et al 1998); and the way data is presented (Harris-Kojetin et al 2007; Peters et al 2007; Fung et al 2008; Damman et al 2010). This could impact on patient choice where patients from more deprived backgrounds with lower attainment levels less likely to make informed decisions. Such patients are also less likely to afford travel to a better performing, but more distant providers (The King's Fund 2010b). Other reasons for consumers' lack of interest in and use of performance data include: disinterest in

the nature of the information (Goldfield et al 1999), lack of trust in the data (Robinson and Brodie 1997), problems with access and lack of choice (Schoen and Davies 1998).

Concerns with publishing performance data include: uncertainty about its relative merits and risks; potential adverse consequences and gaming; implications on trust and professional morale; and doubts about the most effective level for reporting data (Marshall et al 2000). Other areas of concern relate to the validity of the performance measures themselves (Giuffrida et al 1999; Kerr et al 2007), and the validity of implicit or explicit comparisons of performance (Parry et al 1998; Rixom 2002). Concerns have also been expressed over the failure to adequately adjust for case mix in data sets. This can lead to hospitals or clinicians who treat higher-risk patients being labelled as poor performers, or to providers preferentially selecting lower-risk patients (Werner et al 2005; Dranove and Sfekas 2008; Bardach and Cabana 2009).

Restricting access to the best health care may be the result of higher performing healthcare systems charging for their services (Mukamel and Mushlin 1998). Other unintended consequences of publicly releasing performance data include: Risk of improved reporting without necessarily improving performance and releasing performance data on performance indicators simply because they are the easiest to measure rather than those which deliver the best outcomes (Loeb 2004). Mannion et al (2005) provides examples of where public release of performance data has been shown to act as a disincentive for improvement. Mannion and Goddard (2001; 2003) found that publically releasing performance data rarely acted as a primary driver of quality improvement activities because of concerns about credibility, timeliness and lack of incentives and external accountability. Mannion and Goddard, (2003; 2004) also reported that while general practitioners (GPs) were aware of performance data, it was almost never discussed with patients, colleagues, hospitals or local health boards, and that consumers were unaware of the data.

In December 2002, three American Hospital Associations were encouraged to collect and report data voluntarily on a minimum of 10 quality measures relating to three clinical conditions: myocardial infarction (MI), pneumonia and heart failure. This formed part of a public-private collaboration programme intended to improve quality called the Hospital

Quality Alliance (HQA 2007). In March 2003, hospitals subscribing to the quality-benchmarking data base were invited to join a multiyear collaborative known as the CMS-Premier Hospital Quality Incentive Demonstration (HQID) whose goal was to determine if economic incentives were effective in improving quality of inpatient care. Hospitals that were accepted for inclusion submitted information on 33 quality indicators relating to five clinical conditions: coronary artery bypass grafting (CABG), acute MI, heart failure, community acquired pneumonia, and hip and knee replacement. Hospitals whose annual performance fell within the top decile on a composite of measures for each of the clinical conditions received a 2% bonus payment and hospitals in the second decile received a 1% bonus payment. The financial rewards were partly offset by financial penalties of 1 to 2% in hospitals failing to exceed performance of those in the lowest two deciles, as established during the program's first year. The demonstration project lasted almost three years commencing in the fourth quarter of 2003 and finishing in the third quarter of 2006. The overlapping timescales for reporting from both the HQA and HQID enabled improvements in outcomes associated with public reporting of data and those achieved through financial rewards to be compared. Although both pay-for-performance hospitals and control hospitals demonstrated improvement in each of the individual and compound measures of performance over the 2 year period, the pay-for-performance hospitals showed significantly greater improvement than the control hospitals in 7 of the 10 individual performance indicators and in all of the composite process measures. Differences in the composite measures of performance between the two hospital groups increased throughout the 2 year period for each of the clinical conditions. An inverse relationship between baseline performance and improvement in both groups of hospitals was seen following a stratified analysis of the data. The results from the latter studies suggest that public reporting and pay for performance are two key interventions that demonstrated a reduction in variance of performance and quality of health care. Although the impact of financial rewards appeared modest the results suggest that such incentives can catalyze improvements in outcomes among hospitals already engaged in public reporting. And although the majority of financial rewards were made to hospitals with the highest baseline performance, hospitals accepted to participate across the whole spectrum responded in a similar manner possibly motivated by the desire to avoid financial penalties.

Limitations of the study included: A difference in population characteristics; limited number of measures monitored (only ten out of a possible thirty three) which could have led to an adjustment bias; a possible modest incentive where a higher reward could have led to an even greater performance improvement; and for hospitals constantly under-performing, interest in a financial reward scheme is likely to decline over time. A combination of performance indicators which incorporate both achievement of pre-determined and relative improvement might have led to different outcomes. Williams et al (2005) highlights a need to link pay-for-performance and public reporting to other quality improvement efforts.

The most important objective of publishing performance data is to encourage providers to improve their performance. According to Berwick (2003) this goal can be achieved through a selection pathway or a change pathway. This will allow healthcare professionals and organisations to improve performance by changing their work procedures and/or professional culture, and enable organisations to make the necessary structural changes. A prime example of appalling quality that resulted in catastrophic consequences for patients was the Mid Staffordshire investigation (Francis 2013). This is an example of where things can go terribly wrong in the hands of poor leadership despite performance management systems being in place. Consumers, patients and purchaser organisations that are in a position to do so can select the best healthcare professionals and organisations. However, this type of selection will not change the quality of the delivered care by itself it can only act as a stimulus for quality improvement.

2.8 Primary Care-Led Commissioning

This section provides a definition of commissioning in healthcare along with examples of how commissioning processes have been used in the NHS. The different models of primary care commissioning are described outlining the positive and negative aspects of each model that can either facilitate goal alignment or act as a barrier to achieving desired goals.

Features of successful primary care commissioning and potential associated problems are described. Future challenges facing primary care commissioning are described which include a national drive to improve productivity during a period of economic austerity with no growth monies available for investment in patient services.

2.8.1 Definition of Commissioning in Healthcare

Commissioning in the NHS has been defined as:

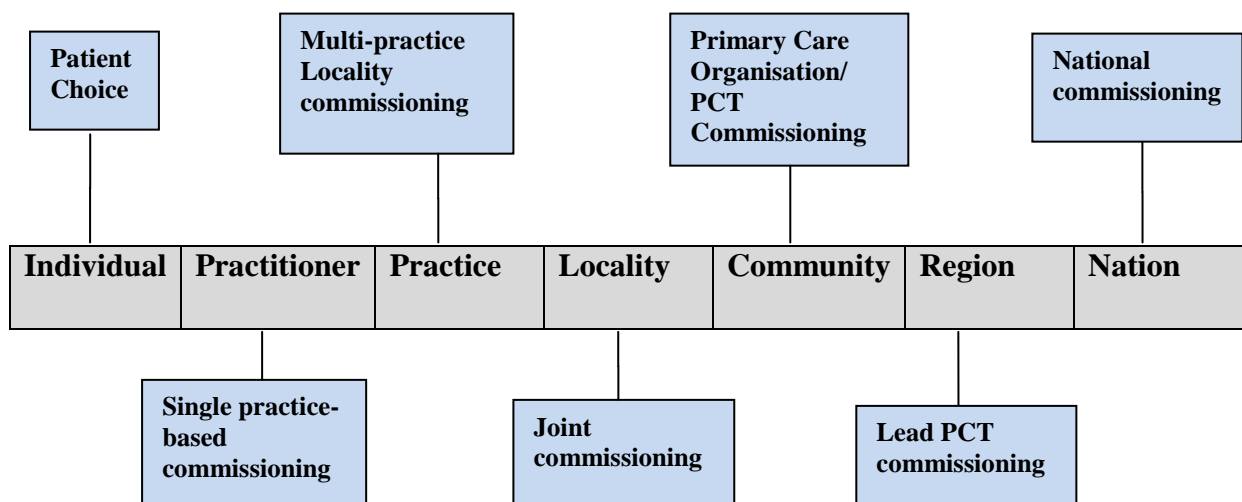
“the process of ensuring that the health and care services provided effectively meet the needs of the population”

“a complex process with responsibilities ranging from assessing population needs, prioritising health outcomes, procuring products and services, and managing service providers”

(DH 2010b)

Commissioning involves many different organisations, managers and clinicians to form a complex web of relationships based on a mix of managerial and contractual systems (Baxter et al 2008). Smith et al (2004) provides an overview of how commissioning organisations of varying size can operate depending on the types of services being commissioned. Figure 2.4 provides an overview of the different levels of commissioning in the English NHS at the time of the study.

Figure 2.4: The continuum of commissioning levels in the English NHS (Smith et al 2004)



2.8.2 Use of Commissioning Processes in Healthcare

Health care commissioning processes have been used in various ways to achieve desired objectives. Mays and Hand (2000) describe how commissioning in health care has improved technical efficiency by allowing purchasers to select the best value provider accessible to their population. Commissioning processes have been used to balance years of professional dominance and to challenge traditional methodologies of resource allocation and sectional interests. It has also improved efficiency by permitting purchasers to negotiate a new balance of services with providers. Health care commissioning has encouraged providers to respond more accurately to individual patients' needs to retain contracts with purchasers and facilitate clear lines of accountability for performance of the purchaser/ provider roles in the health system. Commissioning processes have been used to clarify providers' costs in different areas by comparing with alternative providers making priority decisions more explicit (Mays and Hand 2000).

The following sections will provide an overview of the literature outlining various models of primary care-led commissioning including GP Fundholding, Primary Care Groups and Practice Based Commissioning. The respective features of each are described which resulted in improved outcomes and achievement of *goal alignment* or was associated with significant problems that acted as barriers to achieving goal alignment. These can be related to the principal-agent theoretical assumption of *information asymmetry*. At the time of the study Clinical Commissioning Groups (CCGs) were still in the very early stages of development and have therefore been excluded from this section.

i. GP Fundholding

GP fundholding was a voluntary scheme in place from 1991 to 1998 where GP practices were responsible for managing a fixed budget that could be used to purchase medicines and commission certain elective hospital procedures and specialist services on behalf of their patients. If a fundholding practice did not spend their allocated budget, they were able to retain any surplus resources to spend on interventions which improved patient care.

There is limited evidence to suggest that, moderately shorter waiting times for elective procedures were achieved in fundholding practices compared to non-fundholding practices (Beecham 1994, Propper et al 2002) showing that performance could be improved through

primary care-led commissioning at a time when there was growing pressures to reduce waiting times. However, most studies indicate that referral rates in fundholding and non-fundholding practices were similar (Mays et al 2000).

The intention of primary care-led commissioning was to contract with providers for more appropriate care by assessing the health needs of their local populations and commissioning services accordingly. The academic literature suggests that service redesign in primary, intermediate and community settings was a product of primary care-led commissioning (Audit Commission 1996; Goodwin 1998; Smith et al 2000; Mays et al, 2001; Smith and Goodwin, 2002).

Primary care-led commissioning appears to have been most successful when focusing on developing specific services in primary and intermediate care rather than taking responsibility for the entire commissioning budget or range of services (Mays et al 2000). Provider responsiveness to the demands of commissioning agencies before the development of PCG/Ts marginally improved as a result of GP fundholding (Goodwin 1998; Le Grand et al, 1998; Mays et al, 2000). As GPs are independent contractors with most owning their own practices and there was limited monitoring of where the money was being invested in GP fundholding, the unspent resources could easily be translated into future income (Smith et al 2004).

Fundholding arrangements resulted in rewards being given for particular forms of behaviour which have been described by Croxson et al (2001). First, as budgets were based on the former year's activity, there was an incentive to increase referrals in the preparatory year. Second, only a subset of elective procedures was covered by the budget which resulted in a change in the relative prices of emergency and elective activity making emergency admissions less expensive than non-emergency admissions and depending whether it was included in the scheme, different types of elective activity. Third, there was an incentive for providers to admit patients from fundholding practices which were funded as a cost per case reimbursement compared to the larger health authority organisations that tended to commission the same services based on block contracts. Finally, the generous funds awarded to fundholding practices particularly in the early years, may have increased their bargaining power, resulting in preferential access for their patients over those registered with non-fundholding practices. The voluntary nature of both practice-based purchasing through GP

fundholding and Total Purchasing Pilots meant that not all GP practices chose to sign up to the initiatives. It is believed that this led to two-tier access to care and resulted in increasing inequities (Audit Commission 1996; Mays et al 2000; Mays et al 2001).

Shifting resources from secondary care to commission services in alternative settings in primary or intermediate care is a problem recognized by most commissioning organisations and primary care-led approaches have not been successful in negotiating service changes with hospital specialists (Smith et al 2004). Some studies suggest that the costs associated with some of the primary care based services were in fact greater than the equivalent hospital-based services (Goodwin, 1998).

ii. Primary Care Group (PCGs) and Primary Care Trusts (PCTs)

The White Paper: The New NHS: Modern and Dependable (DoH 1997) announced that GP fundholding would be abolished and replaced by Primary Care Groups (from 1999 to 2002). PCGs consisted of groups of GP practices serving geographically defined populations of between 46,000 and 255,000 that would take on commissioning the responsibility from fundholders and health authorities. It was compulsory for all GPs to be involved in the new commissioning arrangements that were intended to retain the benefits and address the flaws associated with fundholding. Initially PCGs would be a sub-committee of the Health Authority deploying a devolved budget with a gradual move towards fully integrated Primary Care Trusts (PCTs) in 2002. PCGs were under contract to the Health Authority who would hold a budget for commissioning most forms of secondary and community services on their patients' behalf. Although the Health Authority would continue to be responsible for strategic planning and accountability they would no longer act as a major purchaser. PCGs could retain any surpluses which would be shared between themselves and the individual practices. PCGs had freedom in the way this money was spent provided it was spent strategically to develop primary care. GP practices could spend their allocation of the surplus on a predetermined list of activities (DoH 1998a).

Practices that spent less than their "activity share" allocation of the secondary care budget were entitled to the whole of the first £10,000 and half of the next £70,000 with the remainder going to the PCG, and nothing from any surplus over £80,000. However if the PCG overall was in deficit, then all practices' surplus would be set against that deficit.

PCGs were considered by some as a partial successor to the GP-fundholding scheme. PCGs enabled surpluses to be shared and involved commissioning of services across primary, secondary and community care which would be held under the same budget. This meant that there was far more potential to avoid the health inequities seen with fundholding practices (Hausman and Le Grand 1999). Compared with fundholding where patients could choose to register elsewhere if they were unhappy with the care they received, the opportunities were far less likely within PCGs which covered much larger geographical populations. Central monitoring involving threats and penalties associated with failure may have shifted motivation into self-interest. Development of avoidance techniques and a greater focus on performance activity was monitored at the expense of what was not, regardless of the relative importance to patient care (Hausman and Le Grand 1999).

Personal attachments (even excluding self-interest) meant that conflicts of interest (with priorities being with their own patients) could give rise to collective problems in terms of less dynamic, less organised, self-interested GPs being tempted to ‘free-ride’ on other more committed, engaged practices. Administrative costs and conflicts of interest among GPs within a PCG could be costly to overcome (Hausman and Le Grand 1999).

100% tax on any surplus made over £70,000 may have resulted in some objections by practices, especially if it was used to offset the deficits of other practices where there was a temptation of less engaged practices to ‘free-ride’ on the back of others if they knew that their deficits would be covered. The only thing providing constraints overspending in both prescribing and secondary care activity were those imposed by PCG management.

iii. Practice Based Commissioning (PBC)

Despite the NHS budget increasing substantially, strategic health authorities (SHAs) and primary care trusts (PCTs) continued to overspend and were perceived as unable to control secondary care expenditure or to commission effectively. As a result the government requested support from general practitioners (GPs) to reduce demand, speed the transformation of services and generate financial savings through what became known as practice-based commissioning (PBC).

PBC groups existed from 2006 to 2013 and were provided with indicative budgets for health care. They were given the freedom to reinvest budgetary surpluses along with the responsibility for redesigning health services and new opportunities to increase their scope as care providers. As practice based commissioners, GPs would be responsible for securing rather than providing services to meet the needs of the local populations for whose health they are responsible. In other words they would be acting as agents on behalf of the patients they serve in terms of discriminating between providers to maximise value and exert influence over providers with regard to quality and price.

Although PCTs were able to develop their technical capacity to commission in their own right and to support practice-based commissioners, PBC groups would require more advanced forms of support than they had received in the past. They would need the right skills to ensure: Robust contracting, performance monitoring, accounting and budget management as well as the need for specialist knowledge to make strategically coherent purchasing decisions. This knowledge was in short supply in GP practices (Lewis and Gillam 2007).

Much of the data used to assess health needs is based on electoral wards rather than practice boundaries resulting in difficulties interpreting and coordinating information especially in urban areas where practice selection operated more powerfully. Evidence-based commissioning is required when planning to commission services bearing in mind that needs and demands are not the same thing. According to Lewis and Gillam (2007), PBC may have encouraged responsiveness at the expense of appropriateness and cost-effectiveness. Equity and public health are key considerations when making decisions on commissioning of services. PBC consortia included practices at different levels of development and more developed practices may have been less willing to share with practices perceived as less-well developed. Closer working between more and less-well developed practices had the greatest potential to raise the quality of primary care in a locality (Lewis and Gillam (2007).

2.8.3 Features of successful primary care commissioning

This section highlights some of the desired features associated with successful commissioning organizations. This can be considered using the principal-agent theoretical assumption of *goal alignment* whilst overcoming the difficulties of improving performance

where the existence of *information asymmetry* is inevitable. As a leading author in this field of academic research Judith Smith, a former lecturer at the Health Services Management Centre in Birmingham; now a Director of Policy for the Nuffield Trust has undertaken a number of systematic reviews relating to different primary care-led commissioning models with teams of experts over broad timescales. As a result the following section makes reference on a number of occasions to these comprehensive reviews which take into account a range of varied studies. The section focuses on the impact that GP Fundholding, Primary Care Groups (PCGs), Primary Care Trusts (PCTs) and Practice Based Commissioning (PBC) had on clinicians, the organisation and patients at the time.

Smith et al (2004) illustrates that the size of a commissioning organisation depends on various factors which need to take into account the different population needs and demographics and the type of services being commissioned. Not only is timely and accurate information essential for commissioning purposes but real and meaningful clinical engagement with appropriate use of incentives at all levels across the commissioning continuum is crucial (Smith et al 2004). Whatever combination of commissioning approaches are used, public and management accountability and legitimacy arrangements within an organisation need to be clear and transparent and balance the necessary involvement of clinicians (Goodwin 1998). Engagement of clinicians from both primary and secondary care and use of the right incentives to encourage motivation is essential for successful primary care-led commissioning. Without the right incentives, effective management and good information are not sufficient to promote change (Smith et al 2005). Organisational objectives are more likely to be achieved if clinicians involved in helping to achieve the desired goals have been directly and actively involved in the governance arrangements and decision making process from the outset. The transition from GP fundholding to PCGs and then to PCTs appears to have distanced clinicians from the commissioning processes giving them less influence over how services are shaped. Smith et al (2004) describes PCTs as statutory authorities with boards of appointees closely integrated into the performance management hierarchy of the NHS, and therefore less likely to be perceived as “*belonging to GPs*” (Smith et al 2004).

“*Contestable collaboration*” is a term used to describe the ability of commissioners to shift activity between providers. The literature suggests that effective primary care-led

commissioning depends on the development of “*contestable collaboration*”. There is a need for greater contestability between commissioners and providers to recognize an appropriate trade-off between maintaining good relationships with providers and the possibility of shifting resources elsewhere as part of service redesign (Smith and Goodwin 2002).

A commissioning organisation needs to be of sufficient size to enable effective and efficient commissioning whilst at the same time having adequate local focus to be responsive to local communities, practices, staff and patients (Smith 1997; Lewis 2004). A population base of 100,000 is suggested as being the minimum for commissioning general acute hospital services, and 500,000 is proposed for specialised hospital services (Le Grand et al 1998).

Core commissioning activities such as population needs assessment; service specification and development/redesign are essential features for successful primary care-led commissioning.

Priority setting and resource allocation, contract negotiation and service monitoring need adequate management support if primary care commissioning organisations are to gain confidence of secondary care colleagues in negotiating commissioning and purchasing decisions (Smith et al 2004). An important aspect of the commissioning process is the requirement to understand the effectiveness and outcomes of the models used. This can be achieved by developing a suite of performance measures to provide monitoring information that can be used to determine overall effectiveness of the commissioning process. It can also be used to challenge commissioning organisation on their choice of approaches (Smith et al 2004).

Research suggests that having to work within a performance management system that is tightly defined and centrally managed with requirements to comply and deliver on national targets to the detriment of locally agreed priorities has caused frustration and difficulties by primary care clinicians (Dowling and Glendinning 2003; Commission for Health Improvement 2004; Smith and Walshe 2004). This degree of managerial control and accountability may be considered by some professionals as stifling innovation and restricting freedom. It is important that the correct balance is struck between autonomy and innovation and managerial accountability (Smith and Walshe 2004; Barnett 2001).

Selecting the optimal blend of commissioning models according to local health needs and service configuration is a key challenge for local commissioning organisations. Smith et al (2004) summarizes evaluation criteria that can be applied to the different commissioning models in table 2.6.

Table 2.6: Evaluation criteria for application to different commissioning models (Smith et al 2004)

Evaluation Criteria
Designing various types of services according to their different levels of complexity and scope for contestability.
Offering an element of choice of provider, contestability and responsiveness.
Budgetary and financial risk management and development and delivery of financial plans.
Keeping administration and transaction costs to a minimum.
Developing and sustaining clinical involvement and ownership.
Assessing and addressing health needs.
Tackling health inequalities.
Improving and governing clinical quality.

2.8.4 Challenges for Primary Care Commissioning

According to Smith et al (2004) the different models of health commissioning need to be more closely assessed to examine their impact on service quality and whether they are achieving patient outcomes. A future challenge for commissioning organisations will involve establishing mechanisms to manage primary care-led commissioning within an overall strategic and accountability framework using appropriate combinations of commissioning models suited to service requirements. This will need to be justified against reasons for adopting a particular approach and being clear about the expectations in terms of outcomes. This will be of particular relevance in determining what services and resources will be devolved to clinical commissioning groups (CCGs).

A more systematic assessment to determine the impact of the different models of health commissioning is required with a focus on service and quality objectives that can be closely monitored through use of performance measures targeted towards outcomes. Low levels of management support and limited commissioning capacity has been regularly cited as a reason

for the perceived lack of progress with NHS commissioning (Light 1998a; Smith and Goodwin 2002; Dopson and Locock 2002; Roche 2004; CHI 2004). More sophisticated tools, broader skill sets and advanced forms of support are required by commissioners to ensure services are appropriately commissioned. These include the development of risk stratification and advanced case management techniques, predictive modeling of high user patients, processing and analysis of performance data, and more refined and robust evaluation of service quality and outcomes (Smith et al 2004).

Research evidence supports the link between direct and meaningful clinical engagement in commissioning and achievement of desired commissioning objectives (Mays and Dixon 1996; Ham 1996; Light 1998a; Malcolm et al 1999; Robinson 1999; McClelland et al 2001; Regen 2002; Wilkin et al 2002; Lewis 2004). Smith et al (2005) describe the challenge facing commissioning organisations of getting the right balance between successfully engaging clinicians in the commissioning process without losing the sense of challenge and constructive criticism associated with the purchaser-provider separation. This requires an understanding of the factors which motivate individuals and organisations and alignment of sanctions and reward mechanisms in a way that service objectives and outcomes can be achieved (Le Grand et al 1998; Dudley et al 1998; Croxson et al 2001; Propper et al 2002; Spooner et al 2001).

The commissioning GP has to balance being the agent for the individual patient alongside holding resources for a wider population of patients. There is also a conflict of interest between the provider and purchaser role for GPs involved in commissioning services particularly if they have a financial interest in the provider organisation to which patients are being referred. This potential for conflict of interest needs to be closely monitored and regulated to ensure risks are kept to a minimum. Successful primary care-led commissioning will only be achieved where genuine competition exists between local providers and primary care becomes sufficiently sophisticated to develop community based services (Smith et al 2005).

Factors which facilitate effective commissioning in primary care are summarised in table 2.7.

Table 2.7: Factors required for effective commissioning in primary care (Smith et al 2005)

Stability in organisation of health care, especially structure of commissioning bodies
Sufficient time to enable clinical engagement and strategies to be developed and implemented
Policy that offers patients and commissioners a choice of providers
Policy that enables shift of resources between providers and services
A local service configuration that enables commissioners to choose between providers
A local primary care system sufficiently developed to provide additional services
Incentives that engage GPs and practices in seeking to develop new forms of care across primary and secondary care interface
Effective management and information support for practice based commissioners
Appropriate regulation to minimise conflicts of interest from GPs being both commissioners and providers

In contrast to the previous section which provided a review of the literature on the history of primary-care led commissioning models, the following section provides a summary of health policy papers along with the implications and challenges facing primary care-led commissioning as Clinical Commissioning Groups (CCGs).

2.8.5 Future NHS Reforms and the Productivity Challenge

The White Paper: Equity and Excellence: Liberating the NHS (DH 2010a) outlined what was considered by some as the biggest shake-up of the NHS in decades (Campbell 2011; 2012; Dixon and Ham 2010; Smith and Charlesworth 2011) as ministers prepared to give GPs over £70bn of the healthcare budget, and to roll out reforms that could give the private sector a greater role in health services.

Objectives outlined in the White Paper: Equity and Excellence: Liberating the NHS (DH 2010a) include greater decision making with patients and ensuring they have access to information to enable them to make informed choices. There is more focus on outcome measures based on clinical evidence rather than process targets. Empowering professionals and providers with greater autonomy and subsequently greater accountability for the results achieved is intended to reduce bureaucracy and improve efficiency.

Risks associated with implementing such changes at a time when financial pressures on the NHS were increasing have been reported (Dixon and Ham 2010). Large cuts in management costs and the abolition of primary care trusts and strategic health authorities make it difficult to ensure there is effective change management in place to support such proposals. Direct costs in the form of redundancy payments and related expenses and indirect costs of removing management time away from the NHS's core business of improving patient care contribute to risks of implementing changes in the proposed timescales. The reforms could result in less attention being paid to identifying the efficiency savings required to enable the NHS to meet its increasing demands for care at a time when this should be a top priority:

“the aims of the government would be better pursued by building on existing arrangements. Among other things, this would mean giving GPs more control over real budgets as they demonstrate their ability to lead on commissioning, progressively streamlining the organisation of the NHS instead of undertaking radical restructuring, ensuring continuity of management and leadership to minimise disruption and instability, and encouraging increased collaboration alongside competition. Ways of adapting the learning from integrated systems should also be explored. A measured approach of this kind would minimise the risks we have identified and increase the chances that the reforms will bring benefits to patients.”

(Dixon and Ham 2010 pp.1)

The Kings Fund with the Institute for Fiscal Studies (IFS) examined the implications of the economic crisis for the funding prospects for the NHS. They concluded that with no productivity improvement and no real rise in spending, the funding shortfall could still be around £21 billion by 2013-14. The inescapable conclusion from the King's Fund/ IFS analysis was that closing the gap would inevitably involve major improvements in NHS productivity, with year-on-year gains of up to 6 per cent for six years (Appleby et al 2010)

Focussing on clinical decision-making and reducing variations in clinical practice across the NHS will provide significant opportunities to improve productivity. Reducing variations in clinical service delivery (as highlighted by the Better Care Better Value Indicators), improving safety and quality and improving the prescribing and management of drugs, should be key priorities for providers (Appleby et al 2010).

Emphasis is placed on the critical importance of resource allocation to commissioners ensuring that patients receive added value and improved health outcomes from existing budgets. This would be achieved by focussing on three key areas: reducing expenditure on low-value interventions; redesigning pathways (especially for people with long term conditions) and avoiding unnecessary hospital admissions.

A comprehensive approach using a wide range of strategies will be required by all clinical and management teams to address the scale of the quality and productivity challenges facing the NHS. Given the emphasis on reducing variations in clinical practice, the clinical micro-system is the most important area to focus on: engaging doctors, nurses, allied health professionals and others in delivering improvements in care. This quality and productivity challenge identifies a need for continued investment in developing leadership and change management capabilities at all levels of the NHS. This includes development of both clinical and managerial leaders, together with the analytical and data management skills required to reduce waste and increase efficiency (Appleby et al 2010).

Strategies available to the NHS for improving productivity will involve reducing production costs and improving care outcomes for patients, while others will free up resources for use in more productive ways. Others may lead to actual cash savings that can be used to boost volumes and/or the quality of care the NHS provides. Ultimately, however, “*doing things right and doing the right thing*” involves getting better value for patients from the resources available to the NHS (Appleby et al 2010). Commissioners will need to take responsibility for important priority setting decisions in order to extract greater value for patients and improve health outcomes from existing budgets. Some of these include reviewing systems using the Better Care Better Value clinical indicators:

- i. **Procedures of limited clinical value** - The NHS Institute estimates that the resources wasted by PCTs due to variable commissioning thresholds for just five types of procedure (including tonsillectomy, lower back surgery and grommets), with limited or no clinical benefit, amount to more than £110 million (NHS Institute 2010).
- ii. **Reducing unplanned admissions** - Commissioners should be focusing on redesigning care pathways in order to reduce unplanned hospital admissions and make care closer to home a reality. This is because a large proportion of the NHS budget is spent in acute hospitals, and around two-thirds of occupied bed days are accounted for by patients admitted as emergencies. A proportion of unplanned admissions and associated costs of these admissions could be avoided if more attention was paid to the needs of these patients, especially if different services and organisations worked together more effectively.
- iii. **Meeting the needs of people with long-term conditions** - This has been a priority for the NHS since The NHS Improvement Plan (DH 2004), and some progress has been made in reducing emergency bed day use. Despite this, A&E attendances and emergency admissions continue to rise, and progress in implementing the long-term conditions policy has been slow and uneven (Ham 2009).

Evidence from previous attempts to involve GPs and primary care teams in commissioning services supports the argument that this approach has the potential to make a positive contribution to improving quality and productivity. However, the degree to which GPs will be motivated to take part in commissioning is unclear, beyond the small minority of entrepreneurial GPs who have been at the heart of primary care-led commissioning in the past. What is apparent is that GP commissioners will need access to management expertise and real-time information about their use of services if they are to bring about the desired improvements and there will need to be real incentives to reward GPs for the work involved (Appleby et al 2010).

Involvement of primary and secondary care clinicians with GP commissioning is an opportunity to redesign care pathways and strengthen clinical and service integration. The

potential for driving out inefficiencies and focussing on care closer to home is greater when clinical resource management spans both primary and secondary care. This is achieved by enabling multi-specialty groups to commission and where appropriate provide services (Ham 2008). In July 2010 the Department of Health (DH) published The NHS Outcomes Framework whose three key objectives were:

- To provide a national level overview of how well the NHS is performing.
- To act as an accountability mechanism between the Secretary of State for Health and the NHS Commissioning Board (now known as NHS England).
- To act as a catalyst for driving quality improvement and outcome measurement throughout the NHS. This would be achieved by encouraging a change in culture and behaviour, including a renewed focus on tackling inequalities in outcomes.

The Secretary of State for Health and the NHS England make reference to the following six principles of the NHS Outcomes Framework (DH 2010c):

- i. Having a trajectory of each indicator as the baseline
- ii. Understanding the reasons for variations and potential inequalities in relation to health outcomes
- iii. Understanding the cost-effectiveness of the required improvements
- iv. The impact of timescales in relation to measuring outcomes
- v. Assessing the achievability and affordability of interventions within a set budget
- vi. Understanding the impact of incentives on motivation and behaviour.

The objective of creating accountability in the NHS based on outcomes means that it is essential to assess the extent to which the framework is meeting its objectives. Every five years, therefore, the Secretary of State for Health has agreed to commission an external review of the framework, ensuring that it continues to be an effective mechanism for accountability through improving health outcomes and quality improvement.

NHS England proposes to translate the national outcomes into outcomes and indicators that are meaningful at a local level and will be responsible for holding GP commissioning consortia to account for their contribution to improving outcomes. A quality incentive will be

associated with certain outcomes in the Commissioning Outcomes Framework which will provide a financial incentive payment to GP commissioning consortia (DH 2010c).

This study will use the BCBV productivity performance data as an example and draw on the findings from the academic literature on: Understanding performance management; use of performance management systems; and the barriers and future challenges of performance management in primary care. The principal-agent theoretical framework will be used to explain the findings from the literature and empirical research using the underlying assumptions of *goal alignment* and *information asymmetry*.

2.9 Summary

The origins of principal-agent theory and how it emerged over time is described. The theory has been used to understand various principal-agent relationships in a range of professions, starting in agriculture and management, through to taxation and voting. Various governance relationships between different tiers of management and professionals from a range of disciplines within both the private and public sector can be explained using principal-agent theory. Examples of how these have been applied in health services research are provided. The confusion that exists between the terms *performance management* and *performance measurement* are explored. Examples of how such systems are used in various organisations are provided. Features considered important to successful performance management should be considered if organisations are to achieve their desired goals and objectives. Examples of such features include: having a suite of indicators (Keegan et al 1989; Kaplan and Norton 1992) which are flexible (Propper 2003) and multi-dimensional (Kennerley and Neely 2002) and can be used for the purposes of strategic planning (Greiling 2006). Barriers associated with performance management systems (PMSs) need to be overcome if organisational objectives and goal alignment are to be achieved. Example of barriers to successful performance management are: Poor data quality; cost and collection burden; differing priorities among stakeholders; insufficient linkage with subsequent action (Sheldon 2005); manipulation of data (Audit Commission 2000); indicators selected on weak evidence (Davies and Lampel 1998); and misleading or misinterpreted information (McColl et al 1998, Smith 1995).

Use of incentives is an important feature of performance management systems and is an important aspect of principal-agent theory in terms of facilitating goal alignment. Design features associated with successful sanction and reward schemes must be considered at the planning stage of development of incentive programs, if goal alignment is to be achieved. Pay-for performance schemes in healthcare draws largely on the research undertaken in the UK (Campbell et al 2009; Doran et al 2006; Roland 2004; Sutton et al 2012; Ryan and Doran 2012; Fleetcroft et al 2012) and the US (Werner et al 2011; Mullen et al 2010; Epstein 2006; Epstein et al 2004; Rosenthal et al 2005). Despite broad international experience of pay-for performance systems, evidence of their impact and effectiveness on achieving health outcomes is limited (Wilson 2013; de Bruin et al 2011; Emmert et al 2012; Wright 2012; Mullen et al 2010) and tends to impact on improvements in provision and structure (Wilson 2013) and clinical processes (Peckham and Wallace 2010) rather than outcomes. Despite the lack of research to either support or deny their effectiveness in motivating improved quality and cost-effectiveness of healthcare (Rosenthal & Frank 2006) and despite concerns over their unintended consequences, incentive programs continue to be introduced.

Although increasingly common to release information about performance in health care, its effectiveness in changing behaviour of consumers, providers, purchasers or professionals has not been determined (Ketelaar et al 2011). Most of the literature on public release of performance data is based on studies undertaken in the United States. As governments, regulators, purchaser and provider organisations, health professionals and consumers of health care become more interested in measuring performance (Smith et al 2009), it is not always clear who the information users are or what the release of data is expected to achieve. The lack of agreement and diverse aims associated with public release of data have made it difficult to identify evaluation criteria that can be used to assess its impact and has thus led to a failure to justify publishing this information (Marshall et al 2000). Problems associated with public release of performance data are summarised which need to be considered if organisations are to develop successful strategies to overcome these issues and achieve goal alignment.

The impact of performance management on achieving outcomes and the implications of incentives according to various commissioning models describe the different factors which have and have not been successful in achieving organisational goals. Improving technical efficiency by allowing purchasers to select the best value provider, challenging traditional

methodologies of resource allocation and improving efficiency by permitting purchasers to negotiate a new balance of services with providers (Mays and Hand 2000) are all examples of how commissioning processes have been used to varying levels of success in the NHS. An overview of three primary care-led commissioning models: GP Fundholding, Primary Care Groups (PCGs) and Practice Based Commissioning (PBC) outlines the positive and negative aspects of the different models that could either help or hinder goal alignment.

The White Paper: Equity and Excellence: Liberating the NHS (DH 2010a) outlines the new primary care-led commissioning arrangements. A summary of more recent publications relating to the intentions of the new reforms and associated potential risks with implementation in the proposed timescales are described. These will impact on achievement of the overall desired goals.

Although objectives of the NHS reforms involve: improving access to information, enabling patients to make informed choices and focussing on outcome rather than process measures (DH 2010a), the literature suggests there are significant risks associated with implementing such changes at a time when financial pressure on the NHS is increasing. As the economic position worsens with no growth monies available to invest in NHS services, more pressure is being placed on NHS organisations to make efficiency savings and improve productivity. These include: reducing variations in clinical service delivery (as highlighted by the Better Care Better Value – BCBV performance indicators) and ensuring that patients receive added value and improved health outcomes from existing budgets. This will be achieved by focussing on three key areas: reducing expenditure on low-value interventions; redesigning pathways (especially for patients with long-term conditions) and avoiding unnecessary hospital admissions (Appleby et al 2010).

The aim of this study is to understand how the principal-agent theoretical framework can be used to attain a better understanding of performance management in primary care.

This study will explore what different professionals (clinicians and managers) understand by the term *performance management*. Use of performance management systems in primary care will be explored, using data from the Better Care Better Value performance (BCBV) indicators as an example. The barriers and future challenges to performance management will be explored across a range of professionals and organisations.

Chapter 3

Methodology

3.0 Introduction

This chapter provides an overview of the methodological philosophy, types of research methodologies and research methods. It demonstrates how the different elements are inter-related through an over-arching methodological framework. The research question is outlined in section 3.2 which provides the type and context of the study.

Section 3.3 describes the methodological philosophy relating to positivist and phenomenological (interpretivism) paradigms. These are explained with regard to their respective characteristics and ontological assumptions. The importance of the relationship between the different research paradigms and respective research methodologies is described. Reasons for rejecting the positivist approach and selecting the phenomenological paradigm for this study are provided.

Sections 3.3 to 3.5 describe the different types of research methodology and the characteristics associated with positivistic and phenomenological approaches. Reasons for rejecting particular approaches and justification for selecting case study methodology are provided. Characteristics of case study methodology are explained. These include: internal and external validity, triangulation techniques, generalisability, transferability and reliability. Limitations associated with case study research are described. These include: prejudices, weaknesses and bias. Techniques used to minimise these problems are provided in sections 3.6.6 and 3.6.7 respectively.

Section 3.7 outlines the role of theory in case study research and the importance of being able to apply the findings to areas of wider significance when underpinned by an appropriate theoretical framework. Principal-Agent Theory is the selected theoretical framework used to explain the findings and contextualise the discussion, focussing particularly on two of the theory's underlying assumptions: *goal alignment* and *information asymmetry*. Challenges with using this theoretical framework and reasons for its selection are provided in section 3.7.2.

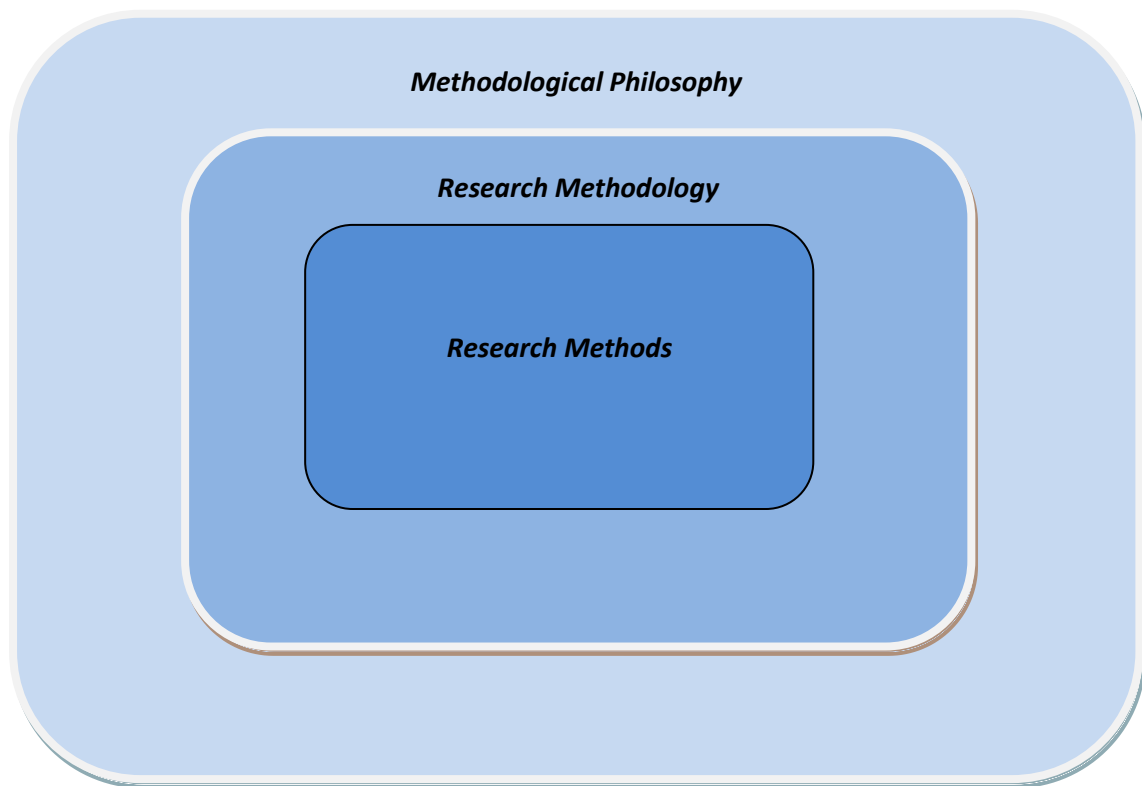
Section 3.8 provides a summary of the research methods used during different phases of the research. Details of the documentation reviewed including the Better Care Better Value (BCBV) performance scorecards and minutes of relevant meetings are provided. A description of the purposive sampling techniques used is provided along with details on how the formal, audio-recorded interviews were carried out.

Details of the interview schedule, participant information sheet and consent form is available in appendices 1 to 3 respectively. A description of data analysis techniques using NVIVO8 software and matrix analysis is provided in section 3.8.6.

3.1 Methodological Framework

The relationship between methodological philosophy, research methodology and research methods is presented in figure 3.0. This provides the overall methodological framework. The methodological philosophy underpins the research methodology, which encompasses the research methods. Each aspect is discussed in this chapter and an explanation for selecting the research methodology and research methods is provided.

Figure 3.0: Methodological Framework



3.2 Methodological Philosophy

Easterby-Smith, Thorpe and Lowe (2002) identify three reasons why understanding philosophical issues is important when undertaking management research. The first is to help clarify the research design through collection and interpretation of data and provide answers to the research questions. Second, knowledge of philosophy can help the researcher understand the limitations of particular approaches and recognise which designs will be successful and which will not. Third, an understanding of philosophy can enable creation of designs, which may be outside the researchers experience and suggest how to adapt research designs according to the constraints of different subject or knowledge structures.

A research paradigm is:

“a framework that guides how research should be conducted, based on people’s philosophies and their assumptions about the world and the nature of knowledge”

(Collis and Hussey 2009; pp.55)

In this context it is about how research should be conducted. Paradigms offer a framework constituting an accepted set of theories, methods and ways of understanding and analysing data. Morgan (1979) suggests that the term ‘*paradigm*’ can be used at three different levels:

- i. Philosophical level - to reflect beliefs about the world.
- ii. Social level – to provide guidance on how the research should be undertaken.
- iii. Technical level – to specify methods and techniques, which should be adopted.

(Cited in: Collis and Hussey 2009; pp.57)

There are two main research paradigms or philosophies:

- i. Positivist or quantitative paradigm
- ii. Phenomenological, qualitative or interpretivist.

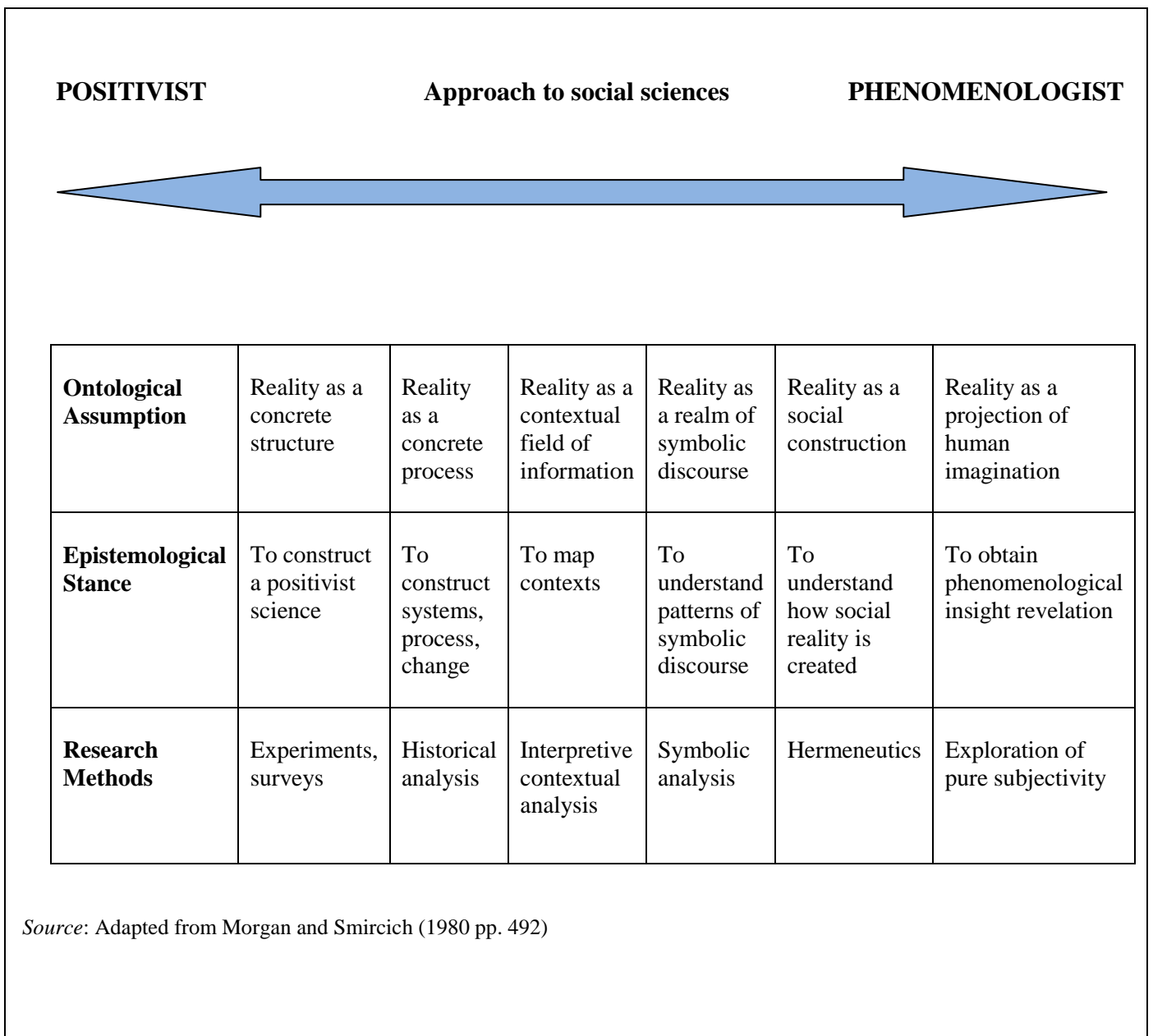
Table 3.0 provides examples of the more common terms used to describe the different approaches within the two main research paradigms.

Table 3.0: Approaches within the two main research paradigms (Collis and Hussey 2009; pp.58)

Positivistic Paradigm	Phenomenological Paradigm
Quantitative Objectivist Scientific Experimentalist Traditionalist	Qualitative Subjectivist Humanistic Interpretivist

Morgan and Smircich (1980) consider the two main paradigms as two extremes of a continuum where the features and assumptions of one paradigm become gradually relaxed and replaced by those of the other as one moves along the continuum. Figure 3.1 illustrates two of the core assumptions and the associated research methods for the six categories.

Figure 3.1: Typology of assumptions on a continuum of paradigms (Collis and Hussey 2009, pp.61)



It is important to understand whereabouts along this continuum is the optimal approach to site the research. Presentation of the findings and subsequent discussion will ultimately reflect the approach selected. This study uses phenomenological techniques through use of qualitative, subjective interpretation. The reasons for selecting this approach are described in section 3.3.2.

3.2.1 Assumptions of the two main paradigms

Creswell's review (1994) summarises the different assumptions of the two main paradigms, outlined in table 3.1. The ontological assumption depends on whether the world is considered as objective and external to the researcher or socially constructed through interaction with human actors. Epistemology is the study of knowledge. This involves examination of the relationship between the researcher and the research. Positivists believe, only phenomena that are observable and measurable can be validly regarded as knowledge whereas phenomenologists try to minimise the distance between the researcher and that which is being researched. The axiological assumption is concerned with values where positivists believe that research should be value free. This is in contrast to phenomenologists, who consider researchers as having values that help determine, what are recognised as facts and interpretations drawn from them. The rhetorical assumption is concerned with the language of the research. Positivist studies tend to be written in a more formal style using past tense in an attempt to convey objectivity whereas phenomenological studies are often written in the present tense. The methodological assumption is concerned with process. A positivist study uses large samples involving: measuring, obtaining objective facts and formulating hypotheses. In contrast a phenomenological study examines small samples, over a period of time often looking for patterns that may be repeated in other similar situations.

3.2.2 Selection of Dominant Paradigm

This study adopts a phenomenological paradigm. An important aspect of the research is to understand 'how' and 'why' particular interventions are undertaken. This requires a close proximity with participants that involves, reviewing documentation, asking questions relating to the data and interviewing relatively small samples of participants over time to identify themes and differences between responses. Quantitative measurement of large samples to establish observable facts, objectivity and formulating hypotheses are not suitable approaches

to answer the research question. The philosophical assumptions that underpin the two main paradigms are summarised in table 3.1.

Table 3.1: Assumptions of the two main paradigms (Collis and Hussey 2009; p.58)

Philosophical Assumption	Positivism	Phenomenological (Interpretivism)
Ontological Assumption (nature of reality)	Reality is objective and singular, separate from the researcher	Reality is subjective and multiple as seen by participants in a study
Epistemological Assumption (what constitutes valid knowledge)	Researcher is independent of that being researched	Researcher interacts with that being researched
Axiological Assumption (the role of values)	Research is value-free and unbiased	Value-laden and biased
Rhetorical Assumption (the language of research)	Researcher writes in a formal style and uses the passive voice, accepted quantitative words and set definitions	Researcher writes in an informal style and uses the personal voice, accepted qualitative terms and limited definitions
Methodological Assumption (the process of research)	<p>Process is deductive</p> <p>Study of cause and effect with a static design (categories are isolated beforehand)</p> <p>Research is context free</p> <p>Generalisations lead to prediction, explanation and understanding</p> <p>Results are accurate and reliable through validity and reliability.</p>	<p>Process is inductive</p> <p>Study of mutual simultaneous shaping of factors with an emerging design (categories are identified during the process)</p> <p>Research is context bound</p> <p>Patterns and/or theories are developed for understanding</p> <p>Findings are accurate and reliable through verification</p>

(Source: Adapted from Creswell (1994; p.5 and 1998; p.75)

3.2.3 Relationship between research paradigms and research methodology

The paradigm adopted is important to selecting the research methodology, recognising that the different approaches lie on a continuum as identified in figure 3.1. The paradigm used to underpin any study is determined by the nature of the research problem being investigated and shaped by the researcher's assumptions.

The limitations of using a quantitative research approach in this study became apparent in the initial stages. The need for rich, detailed, and meaningful data was recognised as essential criteria early on by the researcher.

The features of the two main paradigms are summarised in table 3.2.

Table 3.2: Features of the two main paradigms (Collis and Hussey 2009; p.62)

Positivism tends to:	Phenomenological (Interpretivism) tends to:
Use large samples	Use small samples
Have an artificial location	Have a natural location
Be concerned with hypotheses testing	Be concerned with generating theories
Produce precise, objective, quantitative data	Produce 'rich', subjective, qualitative data
Produce results with high reliability but low validity	Produce findings with low reliability but high validity
Allow results to be generalised from the sample to the population	Allow findings to be generalised from one setting to another similar setting

3.2.4 Positivistic Paradigm

The concept of positivism implies that the social world exists externally which should be assessed using tangible, objective measures, rather than subjective inferences such as intuition, sensation or reflection (Easterby-Smith, Thorpe and Lowe 2002).

The French philosopher August Comte (1853) was the first person to encapsulate this perspective:

“All good intellects have repeated, since Bacon’s time, that there can be no real knowledge but that which is based on observed facts.”

(Lenzer 1975; pp71-86)

The positivistic approach aims to establish the facts or causes of social phenomena, with little desire to understand an individual’s subjective position. The focus of the research is around, objectivity, logical reasoning, rigour and precision. Positivism is based on the belief that the study of human behaviour should be undertaken in a similar manner as studies conducted in the natural sciences.

“According to positivists, laws provide the basis of explanation, permit the anticipation of phenomena, predict their occurrence and therefore allow them to be controlled and subsequently linked back to a deductive or integrated theory.”

(Hussey and Hussey 1997; pp. 52)

The main criticisms of the positivistic paradigm have been identified by Hussey and Hussey (1997) and are outlined below:

- i. Individuals cannot be treated separately from their social contexts. Understanding people requires examining the perceptions they have of their own activities.
- ii. Imposing particular constraints on the findings (similar to the positivist approach that uses a more structured research design) can often mask more relevant and interesting results.
- iii. Researchers contribute their own interests and values to the research, therefore are not in a position to adopt an objective perspective.

- iv. Capturing complex information in a single measure is not sufficiently robust and can be misleading.

A positivistic paradigm often uses large samples to enable statistical analysis to be undertaken that means the results are considered representative of a whole population. The approach adopts an appropriate theory based on available literature and uses this to construct a hypothesis. Due to the requirement of accurate measurement with a positivistic approach, data tends to be quantitative, highly specific and precise information. The location or setting for research undertaken within a positivistic paradigm is artificial and controlled. An example would be an experiment carried out in a laboratory under controlled conditions. Reliability refers to the ability to repeat a research study and obtain the same results each time the study is repeated. Repeating studies to test reliability is essential in positivistic research where reliability is generally high. Validity refers to the extent to which the findings of a study are an accurate reflection of what is really happening in the situation being studied. Because precision, measurement and reliability are the main focus of a positivistic approach there is always a risk that the measure may not reflect the research phenomena. This can result in low validity. Generalisability is concerned with the application of research findings to situations outside of those which have been examined in the study. Positivistic approaches focus on determining how confident the findings from the sample within the study can be applied to the population as a whole.

The criticisms outlined above support the reasons why the researcher chose not to adopt a positivistic approach in this study. Precision, measurement and reliability are not features suited to this type of study. Flexibility of design was an essential feature of this study to enable individual perceptions to be fully evaluated. This was important to avoid losing essential detail and ensure the richness of data was captured.

3.2.5 Phenomenological (Interpretivist) Paradigm

The phenomenological paradigm is concerned with understanding human behaviour from the participants own frame of reference. This qualitative approach stresses the subjective aspects of human activity by focusing on the meaning, rather than the measurement, of social phenomena. The research methods used under this paradigm cover a range of interpretive

techniques which seek to describe, translate and understand the meaning rather than the frequency of particular naturally occurring phenomena in the social world. In contrast to the positivistic approach, the aim of a phenomenological paradigm is to attain depth and richness from the data to allow research to be conducted with much smaller samples. With this paradigm there may be no relevant existing theory and the researcher may construct a new theory to help explain and understand the findings and trends that may emerge from the data. A phenomenological paradigm uses qualitative data where the richness of detail and nuance of the phenomena being studied are the most important aspects, the research is usually carried out in a natural setting such as the workplace and the researcher does not control any aspects of the phenomena. Reliability is interpreted differently in phenomenological studies, where the focus is on whether similar observations and interpretations can be made on different occasions and/or by different observers. In contrast to positivistic studies phenomenological research demonstrates a high validity due to the rich information that is captured, analysed and explained in lots of detail. In this paradigm generalisability is concerned with whether the concepts, trend and theories constructed in a particular setting could be applied in other environments.

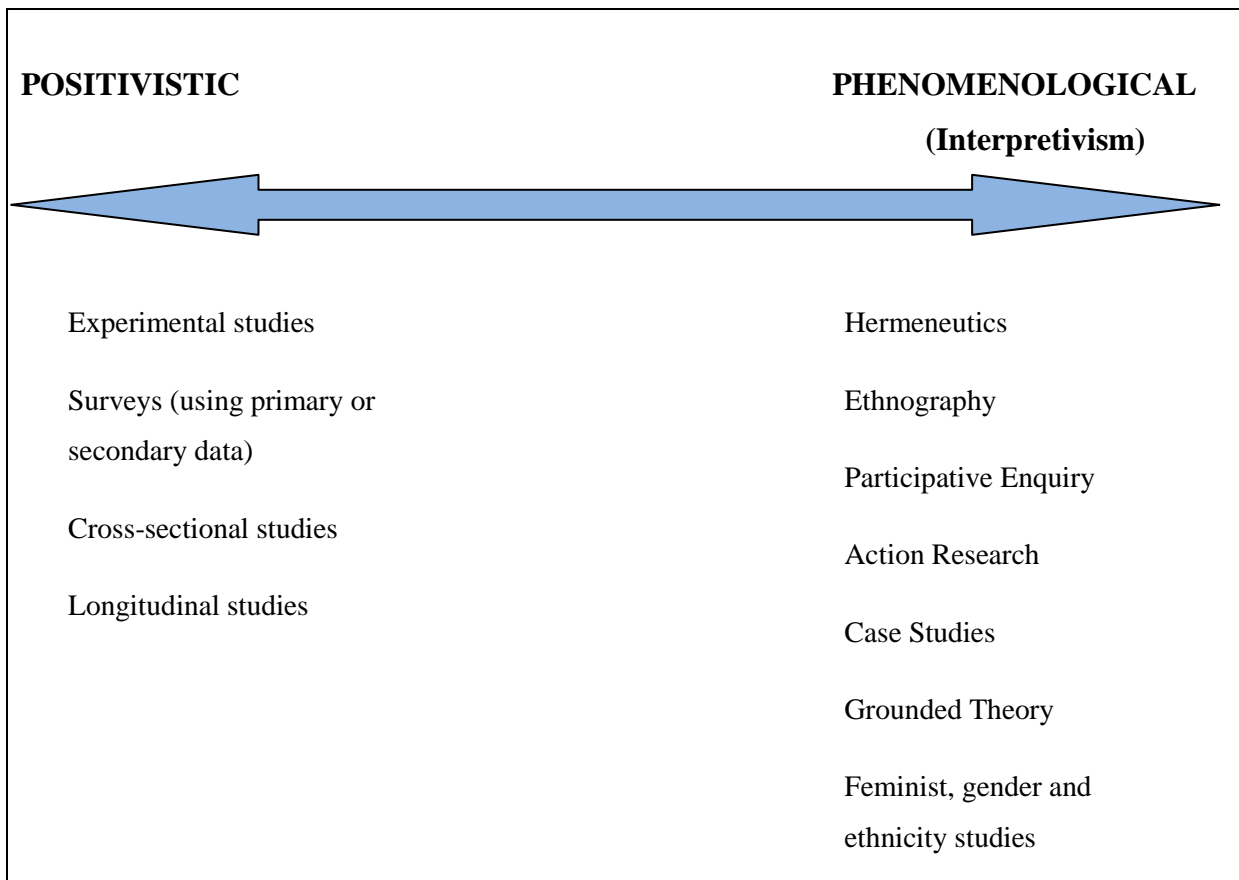
This study is more suited to the phenomenological paradigm as detail and richness of information from a small purposive sample is more important than accurate measurement of specific, precise quantitative information using large samples. It is important to demonstrate high validity through understanding the meaning of performance management, use of performance data and barriers to performance management in primary care. This can be achieved through capturing, analysing, explaining and interpreting the detailed information across the range of professionals participating in the study.

3.3 Types of Research Methodology

There are a range of methodologies that are more suited to one paradigm than another. The selected methodology should reflect the underlying assumptions of the research being conducted.

Figure 3.2 lists the methodologies used in the social sciences, some of which can be adapted for use under either paradigm.

Figure 3.2: Methodologies associated with the two main paradigms (Collis and Hussey 2009; pp.74)



3.3.1 Characteristics of positivistic methodologies

Cross-sectional studies are designed to obtain information on variables in different contexts at the same time. They are often used to explore economic characteristics of large numbers of individuals or organisations and their associated problems. Experimental studies are conducted in a controlled environment such as a laboratory or alternatively may use a natural setting but aspects are controlled in a systematic manner to eliminate variable factors or keep a variable constant. The aim is to assess the impact of varying the independent element on the dependent variable.

Longitudinal studies can be associated with both positivistic and phenomenological paradigms however they are usually considered as a positivistic methodology where the aim of the research is to investigate the same situation several times or continuously over the

study period. This type of methodology enables the researcher to explore and understand processes of change within a social and political context and offer explanations and recommendations based on the emerging findings. Surveys involve studying a sample of subjects from a population through the use of questionnaires, face-to-face interviews or telephone interviews and participants will be asked the same questions in the same circumstances as far as is possible. Descriptive surveys are concerned with measuring the frequency of a specific population whereas analytical surveys aim to establish whether a relationship exists between different variables.

The longitudinal approach may have been of benefit in this study if there had been desire to explore and understand the impact of organisational change on performance management before, throughout and after implementation of the NHS reforms. Although the researcher was studying part time which provided a longer time-frame for data collection, time-scales and capacity meant that this was not a viable option. Despite this drawback, the findings do reflect some of the political changes as participants were interviewed throughout a period of organisational change.

3.3.2 Characteristics of phenomenological (interpretivist) methodologies

Action research, case studies, ethnography studies, studies using Grounded Theory and hermeneutics are all types of phenomenological methodologies with different characteristics. Action research is a type of applied research, which recognises the on-going, changing nature of the social world where both the research and researcher are part of this changing environment. Lewin (1946) considers this type of process as developing a cycle of planning, acting, observing and reflecting. This approach is intended to find an effective mechanism of establishing a conscious change in a partly controlled setting. Case studies are often exploratory by their nature and aim to explore and understand certain phenomena within a particular context. Understanding the significance of the context is essential. Eisenhardt (1989) refers to the case study as research that focuses on understanding the dynamics present within a single setting.

Ethnography stems from the term ‘anthropology’ the study of people and is a phenomenological approach where socially acquired knowledge is used to understand observed patterns of human activity. The aim of this methodology is to have the ability to interpret the social environment in the same way in which members of that society do. Grounded theory was established by Glaser and Strauss (1967) and uses a systematic approach to develop an inductively derived theory about a particular phenomenon. The theory is generated by observations where speculation and reflection lead to development of hypotheses. Hermeneutics is a methodological approach which focuses on the historical and social context surrounding an action when interpreting a text. According to Ricoeur (1977) the hermeneutic process involves interpreting the meaning of a text through continual reference to its context. Participative inquiry refers to research with people as opposed to research on people where participants are involved with collecting and analysing the data. The aim with this style of research is to challenge the power relationship in society. Such studies are often used to capture knowledge and experiences of oppressed groups.

From the phenomenological methodologies, the researcher considered using two methodological approaches at the planning stages that would be suitable approaches to answer the research question. These were case study research and action research. The focus of the study was to explore the meaning, use and barriers to performance management by clinicians and managers within the NHS which more closely reflected case study characteristics. This compared with research to bring about subsequent actions and change which are features more closely associated with action research. Thus case study was the selected methodology for this study. However, it was recognised that the findings and recommendations that emerge from the study may result in use of alternative approaches being used for further research. Characteristics and limitations of case study research along with justification for selecting this methodology are provided in section 3.5.

3.4 The Research Question

A wide range of indicators are used to assess performance in primary care. With this in mind it was important to understand what the term *performance management* meant to different professionals. A second important factor was the need to understand how performance

management systems and performance data was used by different professionals. A third and final aspect that required further exploration was to understand the barriers to performance management in primary care. The three dimensions constitute the over-arching research question. Principal-agent theory is used to explain the empirical findings and academic literature associated with each.

The research question is:

“How can the Principal-Agent Theoretical Framework be used to attain a better understanding of performance management in primary care?”

To answer the question fully, it has been divided into the following three related sub-questions:

a. Understanding of performance management in primary care:

How can the principal-agent theoretical framework be used to explain and understand the perceptions of performance management from the perspective of various professionals.

b. Use of performance management systems in primary care:

How can the principal-agent theoretical framework be used to explain the findings from use of performance management systems in primary care?

c. Barriers to performance management in primary care:

How can the principal-agent theoretical framework be used to explain the barriers to improving performance in primary care.

3.5 The Case Study

The following section outlines the characteristics and aims of case study research and provides an understanding of how the theoretical framework is used in this methodological approach. Section 3.6.3 outlines the reasons for selecting this methodology. Validity, triangulation techniques and procedural reliability are important features of case study

methodology. These are described in section 3.5.4. Prejudices and weaknesses associated with the approach and the techniques adopted by the researcher to minimise these limitations and bias are described in sections 3.5.5 and 3.5.6 respectively.

A case study is not a method but a research strategy and falls within the phenomenological paradigm selected by the researcher for this study. The phenomenon is not isolated from its context (as in laboratory research) but is of interest precisely because the aim is to understand how behaviour and/ or processes are influenced by, and influence the context (Hartley 2004). A *case* is generally a bounded entity: a person, organisation or other social phenomenon. In this study the case refers to the phenomenon or programme of performance management in primary care in the context of the principal-agent theoretical framework. The study focuses on: understanding of performance management, use of performance management systems and barriers to performance management by clinicians and managers. The approach uses a combination of methods. This is partly because of the complex phenomena being studied and partly to triangulate data and theory, thereby improving validity. A case study cannot be defined through its research methods. It has to be defined in terms of its theoretical orientation which places an emphasis on understanding processes alongside their contexts (Hartley 2004). Case studies are often described as exploratory research and used in areas where there is a dearth of knowledge or few theories exist (Hussey and Hussey 1997).

The aim of a case study is to provide an analysis of the context and processes which illuminate the theoretical issues being studied. It is particularly suited to research questions which require detailed understanding of social or organisational processes because of the rich data collected in context. In organisational research, the case study is likely to be one or more organisations, or groups and individuals operating within or around the organisation such as within particular departments or specific types of employee (Hartley 2004). The organisations involved in this study were Primary Care Trusts (PCTs), a Strategic Health Authority (SHA) and a range of GP practices. Individual participants included clinicians and managers across each of these organisations.

Case studies enable the number and variety of traits, qualities and habits combined in a particular instance. This can provide real-time information that can be as up to date as the researcher requires, making the approach particularly useful for contemporary issues

especially in the fast-changing environment of business and management studies. The case study was particularly suited to this research on understanding, use and barriers to performance management at a time when organisational change was imminent in the NHS. Case studies are particularly useful to answer *how*, *who* or *why* questions about a set of events where the researcher has little or no control (Remenyi et al 2002). This aspect applies to this study.

Use of a theoretical framework is essential in case study research as findings from such studies will only have a wider significance when they are underpinned by an appropriate theory. Case study theory-building tends to be inductive with opportunities to explore issues in depth and context. Theory development through systematic piecing together of detailed evidence to generate (or replicate) theories of broader interest can result from this approach. This makes the study design flexible and able to adapt to and probe areas of planned but also emergent theory (Hartley 2004). The flexibility of this methodology was important when selecting the case study approach due to: (a) the broad timescale over which the interviews were planned and (b) the proposed NHS Reforms published in the White Paper: Equity and Excellence: Liberating the NHS (DH 2010a).

Theory plays a central role in case study research being both the input and output of the research process. Existing theory is used to make sense of case study observations through which it may be found that the theory needs to be refined, modified or even objected. Generalised theory may then be used in other case studies, through which it could be further generalised (Ryan et al 2002). The theoretical framework used in this study to underpin the empirical findings is the principal-agent economic theory which is described in sections 1.1, 2.1.3 and discussed in more detail in section 3.7.

Exploratory research is often the terminology used to describe case studies in areas where there are few theories or a deficient body of knowledge. However this is not the only type and Scapens (1990) adds the following:

- i. Descriptive – The objective is restricted to describing current practice
- ii. Illustrative – The research tries to demonstrate new and innovative practices

- iii. Experimental – Examines the difficulties in implementation of new procedures and techniques
- iv. Explanatory – Existing theory is used to understand and explain what is happening.

Although this study falls into the fourth category: Explanatory – *using existing theory to understand and explain what is happening*, future research emerging from the findings may be more suited to an alternative approach such as action research where on-going evaluation informs actual change as part of a continuous cycle.

Another type which arises by chance is described by Otley and Berry (1994) which enables the researcher access and an opportunity to examine a particular phenomenon. It is recognised that the different types of case study are not delineated thus one type may be combined with or merge into another.

. Yin (1994) identifies the following characteristics of case study research:

- a need to not only explore certain phenomena; but to understand them within a particular context
- not to commence with a set of questions and notions about the limits within which the study will take place
- to use multiple methods for collecting data which may be both qualitative and quantitative.

Yin (1994) regards a case study in a similar way that a natural scientist regards a laboratory experiment defined as:

“an empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used.”

(Yin 1994; pp.13)

In this context the case study is independent of the research strategy where the use of either positivistic or phenomenological methods of analysis can be used. Yin (1989) also argues that

because the case study follows the logic of an experiment rather than that of a survey, it is not necessary to replicate a case study several times.

Yin's (1994) characteristics can be applied in this study as follows: (a) Understanding the meaning, use and barriers to performance management in primary care (b) The flexibility of the methodological approach enabled changes to participant selection as findings began to emerge (c) Multiple methods of collecting data were used through document analysis, direct observation, minutes from meetings, informal and formal interviews to triangulate the data and improve reliability of the study.

Case study research focuses on specific situations to identify interactive processes essential to understanding. At the same time, other research methods such as: focus groups, interviews, experiments and analysis of archival evidence are supported (Remenyi et al 2002). Schramm (1971) takes a more focussed view of the case study which goes beyond the concept of it as an evidence-collection approach by attempting to highlight or explain the decisions and motivations that underlie the observed processes. This approach suggests a more phenomenological rather than positivistic research methodology.

In business and management research Remenyi et al (2002) describe five general characteristics required for exemplary case study research. First it should be significant where the study is of interest to business and management professionals for both decision making and policy development. Second, to contribute to the body of knowledge, the case study should be complete through careful and rigorous definition of the research problem and adequate consideration of the boundaries during the planning phase. This can be a challenge for business and management researchers as various issues in this field of study have broad boundaries which may overlap with other areas, functions and disciplines. Third, the evidence should be considered from a variety of perspectives through extensive triangulation. The research should display sufficient evidence to present a compelling argument. Finally, the study should be composed in an engaging manner by corroborating facts and evidence that will add to the study's construct validity. Each of these characteristics were considered in the design phase of the study through gaining support from management and professionals involved in policy development and implementation across the participating organisations, and ensuring the research question was sufficiently defined to enable the question to be

answered within the planned timescale. Data triangulation techniques used to link the empirical findings to the literature and theoretical framework were considered at the design stage to improve validity of the study.

In case study research it is important to use appropriate and reliable research methods and procedures that clearly address the research question (Ryan et al 2002). Where traditionally, empirical and quantitative researchers refer to reliability, validity and generalisability, case study design researchers consider the terms procedural reliability, contextual validity and transferability. These concepts are explored in more detail section 3.5.4.

3.5.1 Initial Presentation and Ethical Approval

In June 2007 the East Lancashire Professional Executive Committee (PEC) consisting of clinicians and directors supported a research proposal to explore the understanding and use of performance management in primary care.

Following a presentation of the research proposal to the NHS North West Research Ethics Committee in February 2010, three minor clarifications were requested. These included: consent to the audio-recording of the interviews; consent to use direct quotes and confirmation of start date of the project. Once the recommendations had been amended, final approval to undertake the fieldwork was confirmed. Research governance approval for site specific participation was also attained from each of the following organisations: NHS East Lancashire, NHS Central Lancashire and NHS North West. No additional amendments were required.

3.5.2 Reasons for selecting the case study methodology

Reasons for selecting case study methodology to answer the research question are varied and can be justified for the following reasons. First, the flexible design allows for changes to be made through an evolving process. This is an advantage in studies where data is planned to be collected over long periods of time which was the case in this study where data was collected over 14 months. The rapidly changing re-organisation of the NHS, following publication of The White Paper: Equity and Excellence: Liberating the NHS (DH 2010a) meant that the flexible design associated with case study research enabled minor adjustments to be made. Flexibility was a particularly an important aspect of this research as the study evolved over time to accommodate the changing landscape. Second, the exploratory nature of

case study research enables the use of existing theory to help understand the findings. In this study the researcher used the principal-agent theoretical framework to help explain and understand the empirical findings. Third, case study methodology is particularly suited to studies requiring answers to *how*, *who* or *why* questions about a set of events where the researcher has little or no control (Remenyi et al 2002). This methodology is applied in this study to understand *how* the theoretical framework can be used to understand the meaning of performance management, use of performance management systems and barriers to performance management in primary care. The requirement to collect data over a period of time within its context is important to understand how behaviour and processes are influenced by the context. This aspect is particularly relevant to the study where data was collected over a 14 month period throughout a period of strategic NHS reforms and national and local organisational change. The advantage of being able to explore issues relating to use of performance management information by managers and clinicians in depth and context enabled use of the findings to generate theories of broader interest. Finally, multiple methods for collecting data were used in the form of data triangulation techniques essential to improving validity of the study.

Table 3.3 summarises the key reasons for selecting the case study methodology in this research study.

Table 3.3: Reasons for selecting case study methodology

CASE STUDY PRINCIPLES	RESEARCH DESIGN REQUIREMENTS
Flexible Design	An evolving methodology and ability to change cases where appropriate.
Detailed Understanding	Having the ability to explore in detail organisational processes relating to the use of performance data by managers and clinicians in primary care.
Broad Timescales	The ability to collect data over a broad period of time if required was considered a priority when selecting the methodology.
Data Triangulation	Use of multiple methods for collecting data to improve the validity of study featured highly when selecting the methodology.

3.5.3 Construct Validity

A construct has been defined as:

“the operationalisation of a concept or variable in such a way that it may be used in a research project” (Cited in Remenyi et al 2002; p.189)

Rosenthal and Rosnow (1991) define a construct as:

“an abstract variable, constructed from ideas or images, which serves as an explanatory term” (Cited in: Remenyi et al 2002, pp.189)

Construct validity can be related to establishing appropriate operational measures for the concepts, ideas and relationships being studied. Two important steps when determining construct validity have been identified by Remenyi et al (2002):

- i. Identify all concepts, relationships and issues which will form part of the research. This is applied to the study using: the concept of performance management; the relationships that exist between managers and clinicians; and issues relating to understanding performance management, use of performance management systems and barriers to performance management.
- ii. Demonstrate that the measures identified actually meet the requirements of the concepts, relationships and issues to be studied. The key assumptions of the principal-agent theoretical framework are used to explain the findings from the literature and empirical research.

3.5.4 Internal Validity and Triangulation

In case study research the traditional criteria of internal validity that relates to use of appropriate controls is replaced with contextual validity. This indicates the credibility of the case study evidence and the conclusion that are drawn there from. A key strength of the case study methodology is its ability to use both multiple and a variety of different sources of evidence to corroborate the findings. This process is known as data triangulation (Loveridge 1990) and provides a more robust argument when describing the findings. Multiple sources of

evidence help overcome the problem of construct validity by providing several sources of data relating to the same phenomenon (Remenyi et al 2002).

Evidence may also be collected using different research techniques such as questionnaires and interviews, known as method triangulation. Using a number of researchers from different academic backgrounds with different interpretations of the data may reduce bias associated with an individual researcher; a process described as researcher triangulation.

According to Rosenthal and Rosnow (1991) internal validity is defined as:

“the degree of validity of statements made about whether x causes y”

(Cited in: Remenyi et al 2002; pp.180)

It is necessary to consider plausible alternative explanations of the apparent relationship between x and y when demonstrating internal validity. Internal validity was achieved in the study by ensuring data and method triangulation techniques were undertaken through various sources and approaches including: Review of documentation; carrying out informal interviews and formal audio-recorded interviews; observing meetings where performance management was a primary focus of the agenda; and reviewing physical artefacts with respect to league tables and balanced scorecards. These are described in more detail in the following sections: i to vii.

i. Documentation

Review of documentation was used to corroborate evidence from other sources. Supporting information of verbal accounts from participants can set the context for interviews and discussions within the organisation being studied. It is important to note that such documents were not developed for research purposes so may not necessarily be an accurate reflection of the situation. The documents reviewed in this study included the Better Care Better Value (BCBV) Productivity Performance Scorecards (see appendices 4 to 15), minutes of relevant meetings relating to primary care performance and the PCT Practice Development Framework Balanced Scorecard (see appendix 16). These are described in more detail in section 3.7.

ii. Interviews

Interview techniques are the most frequently used sources of information in business and management research, the style of which varies depending on the study. Open-ended interviews often involve obtaining insights of the respondent and can be more open to bias. Focussed interviews involve interviewing participants for a short period of time using a pre-determined interview schedule. Informal interviews were used by the researcher initially to understand the insights of various managers and clinicians relating to performance management and to help inform the interview schedule. The study used a more focussed approach due to the wide range of disciplines involved and number of interviews undertaken. Face to face interviews were selected to allow the researcher to feel a degree of intimacy with the interviewees. As the researcher was familiar with the majority of local NHS venues where the interviews would take place it wasn't deemed necessary to visit the venues in advance.

iii. Direct Observation

Direct observation is a valuable source of reliable information. The process may involve observing locations, individual behaviour, morale, dress code and corporate culture (Silverman 1994) and can again be used for data triangulation purposes. The researcher attended a number of performance development framework meetings in an observing capacity to help provide an understanding of the discussions taking place around performance management in primary care. The data attained from observation and through minutes was used to help inform the interview schedule and the selection criteria for appropriate participants in the study.

iv. Participant Observation

Participant observation involves the actual participation of the researcher in the work of the organisation being studied. Bias can be a particular concern in this type of approach however used with alternative methods it can be helpful to understand the views of an organisation as part of a case study. The researcher was an employee of NHS East Lancashire and provided professional advice relating to prescribing and medicines management to the organisation as part of her role. Bias was kept to a minimum by interviewing only participants working outside of that discipline and focussing on performance information relating to the clinical BCBV indicators as opposed to the prescribing indicators.

v. Archival records

Archival records are often highly quantitative information and can include old correspondence or service descriptions that may exist on paper or computer records. The researcher examined older outcome data to help understand the trends over time and whether the impact of publicising the BCBV indicators actually led to a difference in performance.

vi. External Validity, Generalisability and Transferability

The traditional criteria of external validity relates to the extent to which findings can be generalised to other settings. However the notion of theoretical generalisations is more appropriate to use in case study research that are related to transferability of the study's findings.

External validity refers to whether the empirical findings are sufficiently generalisable to be applied to a wider environment than the one where the initial study was conducted. Although critics may claim that case studies do not have the same rigour or breadth of evidence as that of surveys for example (Remenyi et al 2002), it is important to understand that the two different methodologies are not interchangeable and have different objectives. Survey research relies on numerical evidence and statistical generalisations whereas case studies rely on rich information that is evaluated based on analytical generalisations. The latter approach aims to provide an association between a set of results and a broader theoretical framework, thus sample size is not such a relevant concern (Yin 1989). In this study the empirical research and findings from the academic literature are explained using the principal-agent theoretical framework.

In development of a theory there is a requirement to test the conclusions by replicating the study in alternative settings. Yin (1989) likens this logic to the replication used in experiments. However in business and management research, most researchers conducting case studies would not compare their perspectives of *generalisable* with those of the physical scientist or social scientist undertaking large-scale surveys (Remenyi et al 2002). This study adopts a methodology that is easily applied to various settings and contexts. This can be applied across public and private organisations, not just those relating to healthcare thus demonstrating qualities relating both to generalisability and transferability.

vii. Reliability

In case study research, procedural reliability is a reflection of the degree to which the research has a good design. This should clearly specify the research question, whether it has a comprehensive research plan, recorded evidence in the form of coherent field notes, and a fully documented case analysis, enabling another person to clearly examine what has been done (Ryan et al 2002).

Reliability is concerned with consistent and stable evidence and is particularly important if the findings are to be applicable to other situations as well as the environments in which the research was undertaken. A positivist would consider reliability as important to minimise errors and bias. In contrast, a phenomenologist would argue that the same results could never be obtained due to the differences across all situations and organisations. To them, reliability would not be considered a high significance (Remenyi et al 2002).

Gummesson (1988) suggests that a limited number of observations cannot be used as a basis for generalisation, nor does it appear to be obvious any longer that properly devised statistical studies based on large numbers of observations will lead to meaningful generalisations.

The researcher in this study ensures reliability by: having a clear, succinct research question; developing a research strategy with clearly defined timelines; and documenting all relevant information at each stage of the process.

3.5.5 Prejudices, Weaknesses and Bias in Case Study Research

Arguments used against case study research are highlighted by Remenyi et al (2002). Bias and a tendency to use incomplete evidence have been suggested as reasons for being a less desirable research methodology compared with experiments or surveys. Interpretation of the social reality being researched rather than provision of an objective representation emphasises the problem of research bias.

A single case study cannot provide sufficient information to make it applicable across a broader population. This argument can be defended in this study as the objective was to expand and generalise theories rather than enumerate frequencies.

A third argument against case study research is that it can take a significant amount of time, can be expensive to conduct and can involve excessive documentation. However, with careful planning at the outset, this difficulty can be overcome as demonstrated in this study.

The difficulty of drawing boundaries around the subject matter of the case is a fourth argument against case study research. This means that time limits on how to expand the case in researching interrelations with other broader systems need to be clearly defined.

Finally, there are often difficulties in gaining access to organisations and information. Again, with careful strategic planning at the initial phase this problem is easily overcome.

3.5.6 Techniques and strategies to minimise limitations

Problems associated with case study research are minimised in this study by adopting a range of strategies:

- Developing a project plan detailing clear study objectives and timescales.
- Developing contingency plans that maintain a link with the study objectives and participant selection criteria if and when access proved difficult.
- Focussing on the need to attain the rich data in context. This would not be captured through use of quantitative methodologies such as surveys.

Case studies are not totally objective due to the biases of both the researcher and participants. This is especially relevant in business and management research, not just during collection of information but also during data analysis when subjectivity can also be applied. Three difficulties in obtaining unbiased testimonials are summarised by Remenyi et al (2002):

- i. Difficulties by participants in being able to recall events accurately.*
- ii. Difficulty participants have in disclosing important feelings.*
- iii. Suspicion individuals may have in revealing information which may reflect poorly on themselves or their superiors.*

(pp.170)

Validity and reliability is achieved by identifying and minimising potential biases using the following triangulation techniques and activities: (a) Using multiple sources of evidence to

corroborate findings through use of documentation, observation, informal and formal interviews (b) Corroborating evidence from various sources at an individual and organisational level. These include clinicians and NHS managers within GP practices and commissioning organisations through thematic data analysis of findings and comparison across the different participating disciplines (c) Using factual information in a logical, systematic approach.

On reflection, being part of the organisation being studied offered more advantages than disadvantages. Access to managers and directors working within the PCT was easy to arrange through having knowledge of the system for booking in appointments. Access to clinicians was relatively straight forward both geographically and from both a reputational perspective from working across the geographical footprint over many years. Trust and credibility offered advantages with respect to being invited to observe meetings and access to minutes which all helped improve validity of the study through data triangulation techniques. Although the advantages have to be weighed against the disadvantages of potential bias from being part of the organisation being studied, on balance the techniques used to minimise bias meant that overall this was beneficial with respect to increasing the validity of the study.

3.5.7 Case Study Process

To enable fair comparison of findings whether this involves highlighting similarities or differences it is essential that recording of information is consistent and uniform throughout the study. Prior to commencing the study a protocol was developed that provided a detailed statement of what the research was trying to achieve along with a strategy to determine how the research objectives would be met. Braiden et al (1993) describe such a protocol as a:

“formal master plan that specifies full particulars of the research, a summary of the questions to be asked during structured interviews, field procedure and details of all types of evidence, as well as the structure of the final report.”

(As cited in Remenyi et al 2002; pp.171)

Field procedures provided details on: participants for interview, access; data collection schedule and where appropriate provision for contingencies. The research question was

designed to reflect the enquiry and act as a reminder when collecting the different sources of data. A pilot study was to test for substantive and methodological issues and help with more appropriate lines of questioning.

3.6 The Role of Theory in Case Study Research

Appropriate use of a theoretical framework in case study research is essential. Although a particular theory may be used at the outset of the study additional theories may emerge as the study progresses. These can be used to provide an understanding of the data and enable the information to be examined in a systematic manner throughout the study to ensure plausibility. The theoretical framework needs to make sense of the particular circumstances of the case as well as enabling and understanding factors of a more general interest and relevance (Hartley 2004). Details relating to a particular organisation from case study research will only have a wider significance when the findings are underpinned by an appropriate theoretical framework. Case study theory building tends, generally to be inductive as the depth and richness of information from the findings is pieced together systematically leading to the development of theories of broader interest. Yin (1994) likens the approach to that of a detective sifting through evidence (some of it relevant and some of it not) to build inferences around what has happened, why and in what circumstances. This detective work not only allows particular features of the case to be understood but also enables analyses and conclusions to be drawn out which may be applicable on a wider basis.

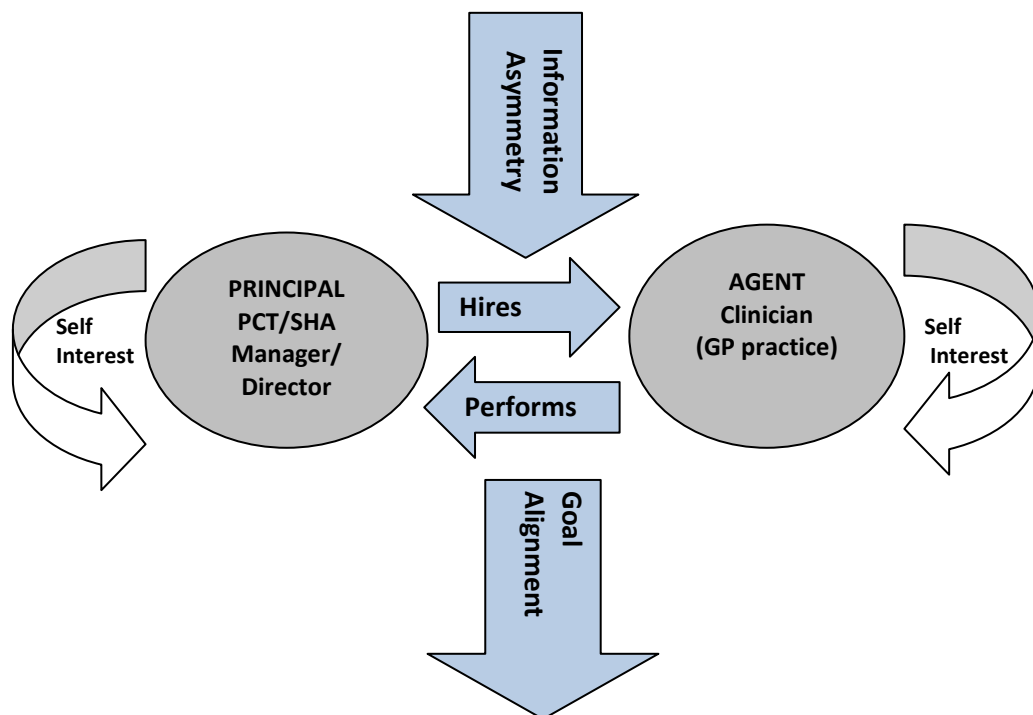
3.6.1 Principal-Agent Theory

Principal-agent theory is a theoretical framework which usually applies to contracts between employers and employees, but can be relevant to incentives for teams and organisations as well. Principal-agent theory is derived from the economic theory of incentives and is described as a situation where one party (the employer or *principal*) needs another party (the employee, contractor or *agent*) to deliver the first party's objectives, but the principal cannot fully control (or even observe) the activity of the agent. The central dilemma being that the contractor or agent has an informational advantage and different objectives to the employer or principal. The agent's objectives are often to maximise its own profits, rather than to produce the maximum quality or quantity of the good the principal desires.

Application of the principal-agent relationship in the study is represented diagrammatically in figure 3.3. Simplistically this relationship is represented as the principals being managers and agents being clinicians, although some managers may also be considered as clinical and practice managers as managerial. The principal-agent theory is the theoretical framework selected to understand and explain performance management in primary care. Reasons for selecting this theoretical framework are outlined 3.6.2.

In this study, the commissioner or Primary Care Trust (PCT) and Strategic Health Authority (SHA) (consisting of middle managers, directors and Chief Executives) represents the principal and GP practices (consisting of GPs and practice managers) represent the agent. The relationship is summarised in figure 3.3.

Figure 3.3: Application of the principal-agent relationship



Two main difficulties that arise from the principal-agent relationship are:

i. **Information asymmetry**

The principal does not have complete information about an agent's actions and performance and there is a possibility that an agent may mislead the principal about their performance. In healthcare for example, this may arise because of the technical nature of the work where clinicians invariably know far more about their own performance and consequent outcomes than managers (Mannion and Davies 2002).

ii. **Incongruent objectives**

Principals and agents depending on the nature of their role often have divergent aims and objectives. Mannion and Davies (2002) provide an example in the NHS where hospital managers view balanced budgets as a priority in contrast to clinicians whose priority is to maximise health benefits for patients.

3.6.2 Justification for selecting principal-agent theoretical framework

Use of the principal agent framework in health services management research has been used to understand various relationships both across and within healthcare organisations. Examples of these include: Exploring the inter and intra-organisational relations in the commissioning of secondary care services in the NHS (Baxter et al 2008); Illustrating the incentives that exist for dysfunctional behaviour within healthcare when only imperfect systems are available (Goddard et al 2000); Understanding the importance of aligning incentives and motivations in health care with respect to earned autonomy (Mannion et al 2007); Developing an understanding of decentralisation strategies (Mannion et al 2005); and demonstrating the economic relationships of co-operation and trust (Goddard et al 1998).

The principal-agent theoretical framework is used to understand relationships between different professional groups and explain the contractual arrangements between different organisations. In this study the theory is used to understand and explain the relationship between managers and clinicians using the theoretical assumption of *information asymmetry*. The theory is also used to explain the empirical findings and academic literature on performance management in primary care under the theoretical assumption of *goal alignment*.

The academic literature demonstrates limited use of this theory in relation to the contractual relationships in primary care. Explanations for this could be the difficulty accessing participants working across multiple organisations and/or timescales involved in the formal interview process. Another explanation may be down to the complex arrangements of performance management in primary care where local organisations have a responsibility to performance manage clinicians who work to a nationally negotiated contract.

Despite these challenges, the two underlying assumptions of principal-agent theory: *Goal alignment* and *information asymmetry* were used to attain a better understanding of the importance, use and barriers to performance management by managers and clinicians in the NHS from a primary care perspective and identify associated problems.

3.6.3 Emerging Methodology

The researcher is a pharmacist, employed at the time as senior clinical manager in NHS East Lancashire. Her role involved providing professional pharmaceutical advice on cost and clinical-effective prescribing to clinicians and managers within the organisation.

The initial objective was to formally interview a range of participants from various disciplines across three organisations. These included: GPs, Primary Care Trust (PCT) executive directors, non-executive directors and middle managers and Strategic Health Authority (SHA) directors across NHS East Lancashire, NHS Central Lancashire and NHS North West (SHA). However as the interviews were due to commence, the Department of Health published The White Paper: Equity and Excellence: Liberating the NHS (July 2010a). The White Paper outlined proposals for NHS reform which would result in fundamental organisational change within the NHS both at national and local levels.

The proposed reforms involved devolving power, responsibility and leadership for commissioning services to GPs who would ultimately constitute the statutory, accountable organisations known as Clinical Commissioning Groups (CCGs). The establishment of an independent and accountable body called NHS England consisting of local area teams would have the responsibility for; leading on achievement of health outcomes, allocating and accounting for NHS resources and leading on quality improvement.

An important aspect of these NHS reforms was recognition of a need to achieve unprecedented efficiency gains and a commitment to release £20billion of efficiency savings by 2014. This would involve a reduction in management costs of more than 45% over the following four years (Dixon and Ham 2010). Following publication of The White Paper Equity and Excellence: Liberating the NHS (July 2010a) the turmoil that existed within PCTs (Smith and Charlseworth 2011) meant that organisations had to re-structure, recruitment freezes were implemented and cost-releasing efficiency plans from all departments were in demand. GP practices were required to start planning for the future with respect to consortia development and taking on the responsibility for the whole commissioning budget in a climate of economic austerity.

The NHS reforms and resulting changes within PCTs led to difficulties engaging with clinicians and managers across NHS Central Lancashire who at the time were undergoing major local organisational change. Despite difficulties achieving managerial and clinical engagement from participants in NHS Central Lancashire, it became apparent that it would be of greater benefit to recruit a broader range of participants within NHS East Lancashire serving populations with different demographic profiles. Thus, rather than recruiting similar participants from two PCTs the emerging methodology enabled selection of participants across a broader range of demographic profiles within the PCT which would soon become East Lancashire Clinical Commissioning Group (CCG). The evolving methodological approach would also enhance the richness of data collected.

As the final interviews drew to a close a potential gap in participants was identified. Although views had been sought from managers in PCTs and the SHA, managers within general practice had not been interviewed. Therefore the scope was broadened to include two practice managers who were invited to participate to attain a management perspective from general practice.

3.7 Research Methods

The various research methods used at different stages throughout the study period and respective data triangulation techniques are summarised in table 3.4.

Table 3.4: Research methods and data triangulation techniques

Stage of Process	Research Methods Used	Triangulation
Phase 1	Documentation	<p>Quantitative Better Care Better Value (BCBV) Productivity Performance Information</p> <p>Qualitative Minutes of meetings where primary care performance discussed such as the BSC</p> <p>Qualitative Literature Review to identify potential gaps in knowledge</p>
Phase 2	Informal Interviews	<p>Qualitative Informal face-to-face and telephone conversations with clinicians and senior management</p>
Phase 3	Purposive Sampling	<p>Qualitative Participant selection criteria for clinicians based on: BCBV performance data, practice size, % S. Asian population, locality and levels of deprivation. Participant selection criteria for management based on: Corporate responsibility for PCT performance and specific area of work in relation to the BCBV performance indicators.</p>
Phase 4	Developing the Interview Schedule, Participant Information Sheet, Consent Form and Pilot	<p>Qualitative Interview schedule developed using findings from lit review and principal-agent theoretical assumptions. Participant information form, consent form and letter of invitation developed based on research ethics requirements.</p>
Phase 5	Fieldwork - Formal Interviews	<p>Qualitative Formal audio-recorded, semi-structured interviews with GPs, PCT Directors, Chief Executives and Senior Managers</p>
Phase 6	Evaluation - Transcription Analysis	<p>Qualitative Analysis of transcripts using NVIVO to organise the data and thematic matrix analysis to analyse the data</p>

3.7.1 Documentation

The documentation analysed and used as part of the triangulation process are described in this section. The first set of documents analysed were those pertaining to the Better Care Better Value (BCBV) productivity performance scorecards which incorporated three clinical and prescribing indicators. The three clinical measures included:

- Managing variation in surgical thresholds based on the relative level of surgery for 5 procedures of limited clinical value
- Managing variation in emergency admissions based on emergency admissions for 19 conditions
- Managing variation in outpatient referrals based on the relative level of outpatient referrals.

The three prescribing measures included:

- Percentage of low cost treatments for lipid modification
- Percentage of low cost treatments for proton pump inhibitors (PPIs)
- Percentage of low cost renin-angiotensin drugs.

The second set of documents reviewed were the minutes of commissioner led meetings where primary care performance was discussed. A key aspect was the development of a GP practice balanced scorecard (BSC) as part of a locally developed Practice Development Framework. A third example of documentation reviewed to triangulate the empirical findings was the results from the literature review. Key themes from the literature were used to provide a link to the research objectives and theoretical framework. These were subsequently used to inform the interview schedule.

The BCBV performance indicators were a range of performance measures developed by the NHS Institute for Innovation and Improvement in collaboration with partner organisations including the Department of Health, the Health and Social Care Information Centre and others to help trusts identify potential efficiency savings. The performance indicators were aimed at commissioners to help inform planning views on the scale of potential efficiency savings in different aspects of care and to generate ideas on how to achieve these savings. By

stimulating ideas on where commissioners should focus their attention in re-designing and shifting services away from the traditional setting of the hospital and out towards community based care, the intention was to persuade commissioners to begin thinking of *how* and *why* differences between organisations existed and to help develop commissioning priorities for the various health communities.

A key objective of these performance measures was to enable NHS organisations to provide the best quality care in the most efficient and cost effective way and to enable trusts to track their performance regularly and benchmark themselves against other organisations in order to improve. The NHS indicators selected to demonstrate use of performance data in this study were those relating to clinical productivity and prescribing. The respective ranking of NHS East Lancashire for each of the three clinical and prescribing indicators was identified and compared with other PCTs across the North West to create discussion and debate during the formal interview process. The East Lancashire position was specifically highlighted as the majority of participants interviewed either worked for or within NHS East Lancashire. This approach was used to generate interest and debate as participants were part of the organisation being explored. The six clinical and prescribing productivity indicators used as an example of performance data in the study and respective ranking for NHS East Lancashire are defined as follows:

i. BCBV - Clinical Productivity Performance Indicators

“Managing variation in surgical thresholds – relative level of surgery for 5 procedures of limited clinical value”

(See appendices 4 and 5).

This indicator showed whether the rate of operations for a basket of five procedures that took place to the expected number, so each operation was weighted in the indicator according to the relative level of activity. The procedures: myringotomy, hysterectomy, lower back surgery, tonsillectomy and dilation and curettage were selected using evidence based thresholds for when the surgery was likely to be effective. A figure of 100 indicated that the rate of surgery was exactly as expected. A figure of 120 meant a rate of 20% higher than expected. There was no correct rate of surgery, but in general high or low numbers may have

suggested management of surgical thresholds could be improved. The data was published each quarter.

“Managing variation in outpatient referrals – relative level of outpatient referrals”

(See appendices 6 and 7).

The ratio showed the level of first outpatient appointments compared to the level that would be expected given national rates and adjusting for the age, sex and need of the population. A figure of 100 meant that the performance was in line with annual national average rates of appointment. The average rate for each quarter meant that the performance was in line with annual national rates of appointment. The average rate for each quarter fluctuated around this figure with seasonal variations. A figure of 110 indicated a 10% higher level of referrals than expected. In general, high or low figures may have suggested poor management of thresholds for referral. The data was published each quarter.

“Managing variation in emergency admissions – emergency admissions for 19 conditions”

(See appendices 8 and 9).

This indicator showed the ratio of actual emergency admissions to the expected level, given the age, sex and need of the population for 19 conditions. These conditions had been identified as ones where community care could avoid the need for hospitalisation. A figure of 100 meant the level of admissions was exactly as expected. A figure of 110 meant a 10% higher level than expected. In general, the lower the rate of emergency admissions for these conditions the better – both for patients and the NHS. The data was published each quarter.

ii. BCBV – Prescribing Productivity Performance Indicators

At the time, the prescribing indicators formed part of the BCBV national performance indicators. These were used for discussion purposes in the study to demonstrate variation and product opportunity costs. Although these have since been replaced with alternatives the focus on efficiency savings and variation continues to be a national priority.

“Lipid modifications – percentage of low cost treatments”

(See appendices 10 and 11).

This indicator related to the number of prescription items for low cost statins (simvastatin and pravastatin) expressed as a percentage of the total number of prescriptions for all statins including combination of ezetimibe with statins.

“Proton Pump Inhibitors (PPIs) – percentage of low cost PPIs”

(See appendices 12 and 13).

This indicator related to the number of prescription items for low cost PPIs (omeprazole and lansoprazole) expressed as a percentage of the total number of prescriptions for all PPIs (excluding combination products for treatment of Helicobacter Pylori eradication).

“Renin-angiotensin drugs – Percentage of low cost Angiotensin Converting Enzyme Inhibitors (ACEIs)”

(See appendices 14 and 15).

This indicator measured the percentage of prescriptions written for ACEI (excluding combination products). This was expressed as a percentage of the total volume of prescribing for drugs affecting the renin-angiotensin system (excluding combination products). A high proportion of prescribing for ACEI meant lower prescribing costs.

The performance indicators were published quarterly at regional level in the form of league tables. Each PCT within a particular region was given a national ranking along with their relative position and productivity opportunity cost per indicator and their absolute value change in the indicator compared to the previous quarter. A comprehensive analysis of the league tables and respective rankings at regional (North West) level for each of the clinical and prescribing indicators is provided in section 4.1.1 of the findings.

Although this performance information was publically available at an organisational level, the researcher considered it beneficial to break down the same data to general practice level (see appendices 5, 7, 9, 11, 13 and 15). Because the study focussed on performance management and use of data by clinicians and managers employed by, or working

contractually within the organisation, it was considered to be more meaningful at local level and thus more likely to increase engagement. The same performance measures (as the BCBV indicators) were developed and presented graphically at practice level using locally available information. Although values for these comparators were slightly different to those used for the BCBV indicators due to slightly different cut off points and adjustments for demographic factors, the information was sufficient to generate an accurate ranking for each practice. This information was used: (a) to inform the sampling techniques when selecting clinicians/practices, managers and directors to participate and (b) as a discussion point during the formal interviews.

A comprehensive analysis of the practice performance and respective rankings at local (PCT) level for each of the clinical and prescribing indicators is provided in section 4.1.1 of the findings.

iii. Minutes of Meetings

A second form of documentation involved reviewing the minutes of meetings where primary care performance was being discussed. A key component of these discussions was around developing a GP practice balanced scorecard (BSC) as part of a locally developed Practice Development Framework (PDF). This framework was intended to cover both developmental and regulatory objectives. The developmental aspect provided GP practices with a learning and development tool intended to enable continuous quality improvement in Primary Care, drive up standards and improve health inequalities. It was also intended to provide individual GP practices with a portfolio with which they could demonstrate their achievement against a range of contractual and development standards. The regulatory and performance monitoring element of the framework covered aspects such as Board assurance of primary care performance, formalisation of contractual sanctions and focussing on under-performing practices. Although the minutes of meetings were a useful form of information that could be used to inform the interview schedule and triangulate data at a later stage, limitations of this source were recognised. One limitation was the potential bias and conflicts of interest that the clinicians involved in the meetings could bring. As these individuals would ultimately form part of the teams being performance managed by managers, this could influence outcomes of the discussion in their favour. A second limitation was the brief, summarised nature of discussion and actions which could miss vital, rich information. This was minimised by attending and observing the meetings over a three month period.

iv. Literature Review

The literature review provided a third form of documentation used to triangulate the empirical findings. Key themes from the literature were used to help provide a link with both the theoretical framework and research objectives. These were subsequently used to inform the interview schedule.

3.7.2 Informal Interviews

Informal interviews were undertaken between March and May 2009 with various clinicians, middle managers and PCT executives. Although the interviews were not formally audio-recorded and transcribed, manual notes were taken. The purpose of the informal interviews was primarily to inform the interview schedule described in 3.7.4 (Appendix 1). A secondary objective was to note important findings that emerged from this process and use these in discussion where appropriate. Individuals who participated in the informal interviews were not selected to participate in the formal semi-structured interviews.

3.7.3 Purposive Sampling Techniques

This section outlines the sampling techniques used for selecting participants in the study. Factors taken into consideration during practice selection were: Practice size, ethnicity, deprivation and combined performance on the clinical and prescribing indicators. PCT executive and non-executive directors were selected based on their corporate responsibility for organisational performance and senior managers were selected based on their role and involvement in managing primary care performance. Strategic Health Authority directors and associate directors were selected based on their role and involvement in performance management in primary care.

i. Selecting GP practices

GP practices were selected using various forms of information to ensure a broad range of responses across participants was achieved. The information used to help inform the selection criteria included the following:

- i. **Practice size** (number of registered patients) – to determine whether GPs working within larger practices had a different perspective of performance management and compared with those working in smaller practices.
- ii. **Ethnicity** (% South Asian) – to determine whether GPs working within a practice with a high percentage of minority ethnic groups had a different perspective of performance management to those GPs working in practices with a low percentage of minority ethnic groups.
- iii. **Deprivation** (based on Low Income Score Index) - to determine whether GPs working within a practice serving populations with a high level of deprivation had a different perspective of performance management to GPs working in practices serving more affluent populations.
- iv. **Performance on Clinical Indicators** (combined clinical productivity BCBV performance indicators) – to explore the understanding, awareness and variation of performance management in primary care using sample performance data on clinical indicators.
- v. **Performance on Prescribing Indicators** (combined prescribing productivity BCBV indicators) - to explore the understanding, awareness and variation of performance management in primary care using sample performance data on prescribing.

The above criteria were represented in graphical format across the 67 GP practices in NHS East Lancashire. Each graph was divided into thirds (as depicted by the numbers 1 to 3 on each graph). This was to ensure participants were selected from a range of practices with different infrastructures and demographic profiles. Figures 3.4, 3.5 and 3.6 demonstrate how size, ethnicity and levels of deprivation were used to select practices. Figures 3.7 and 3.8 provide a graphical representation of how practices were selected using outcomes from the clinical and prescribing productivity indicators respectively. The arrows represent boundaries for each practice cohort or third.

Figure 3.4: GP practice size range based on number of registered patients.

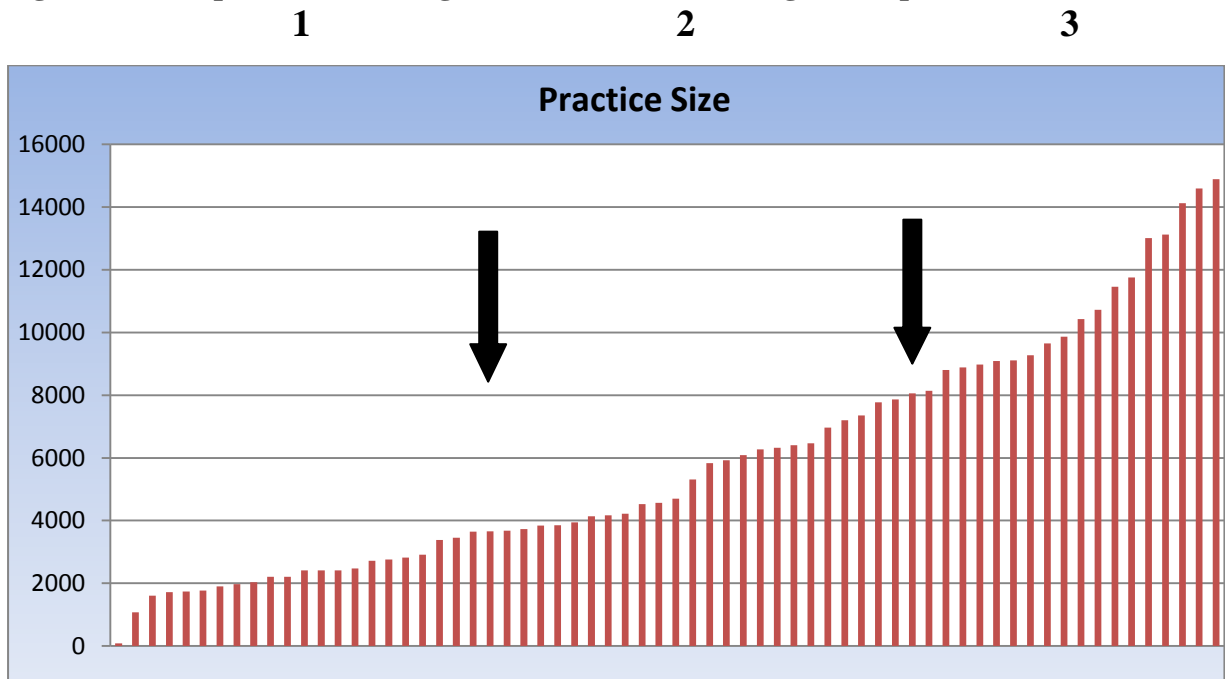


Figure 3.5: % South Asian population across GP practices in East Lancashire

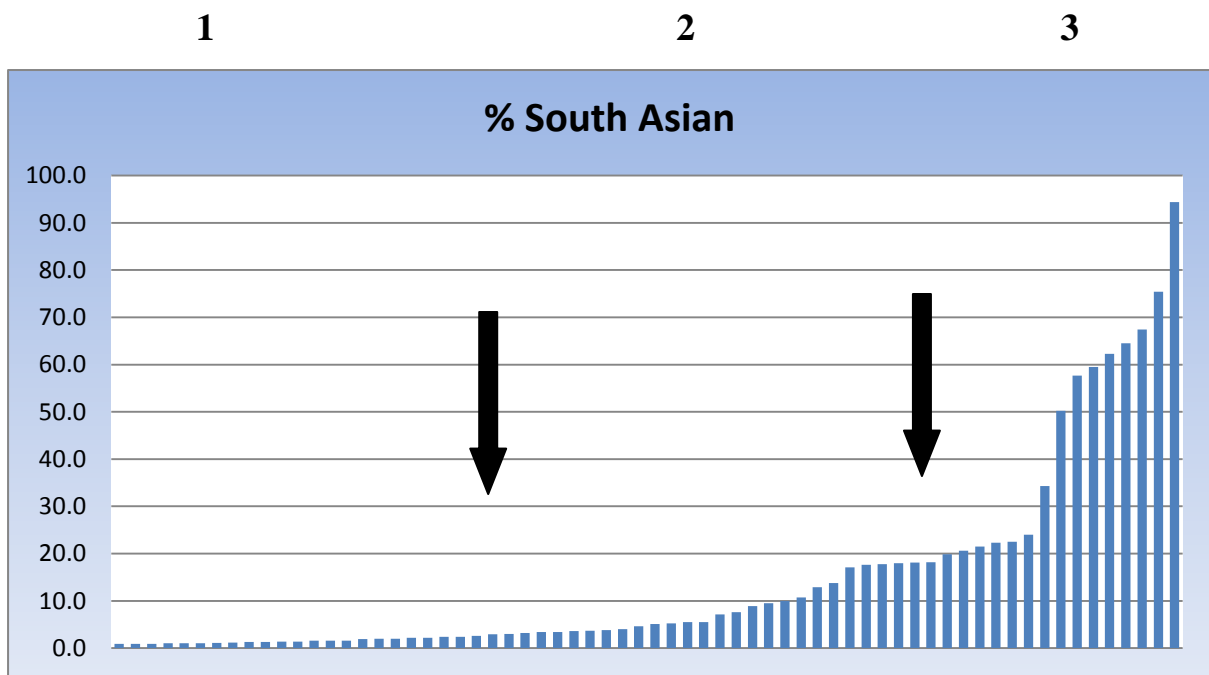


Figure 3.6: % Level of deprivation across GP practices based on the Low Income Score Index (LISI)

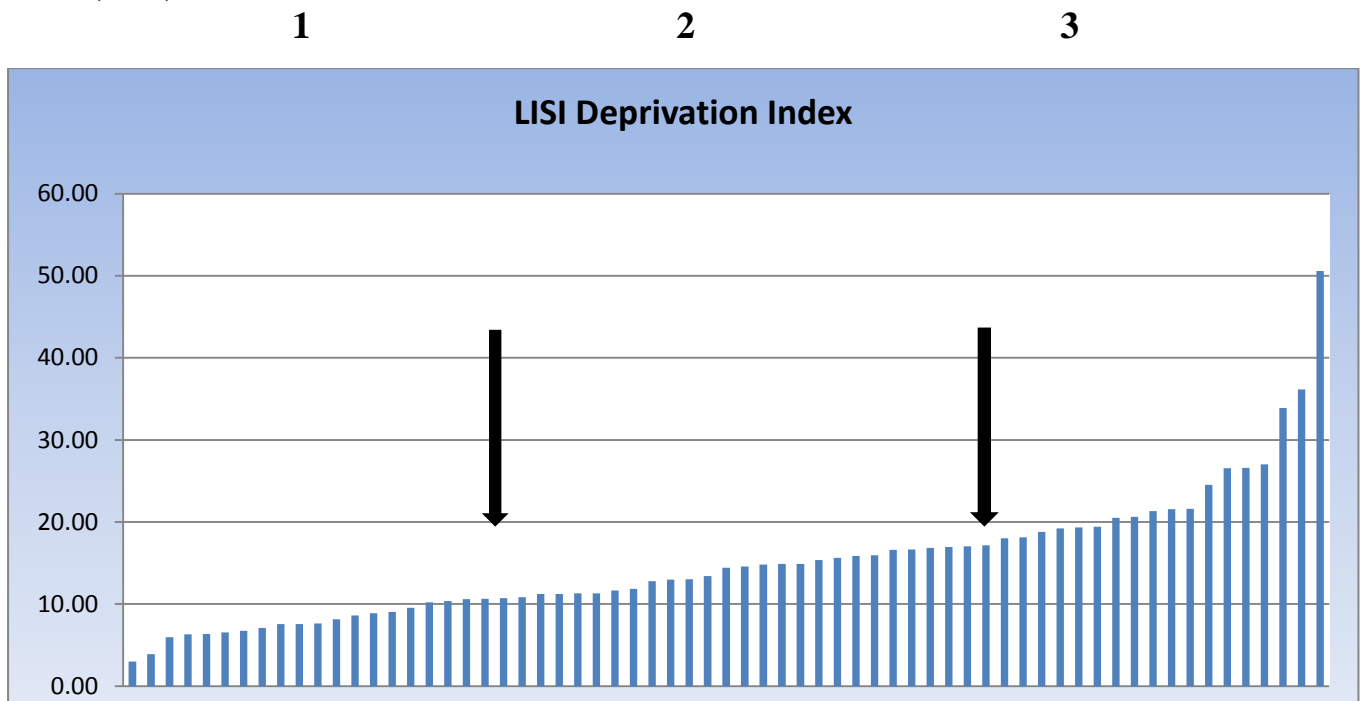


Figure 3.7: Combined Clinical Productivity Opportunity Costs (BCBV) based on practice performance

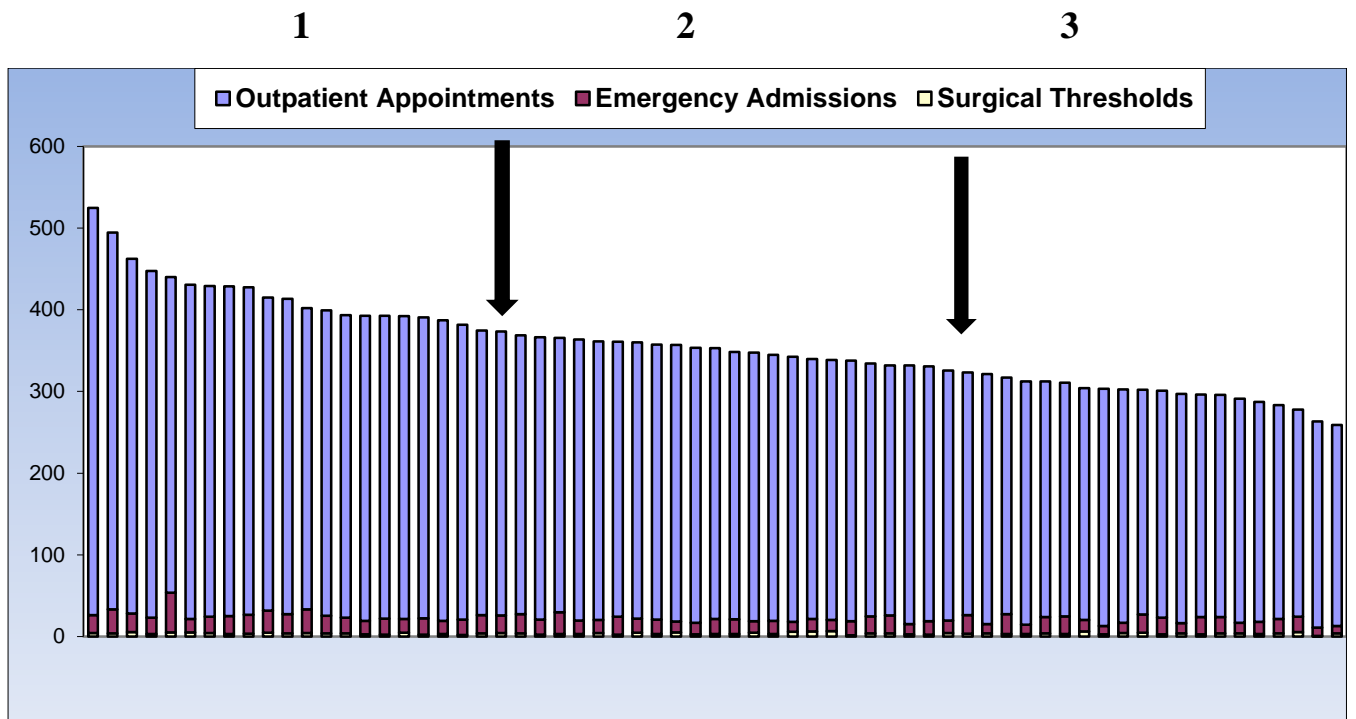
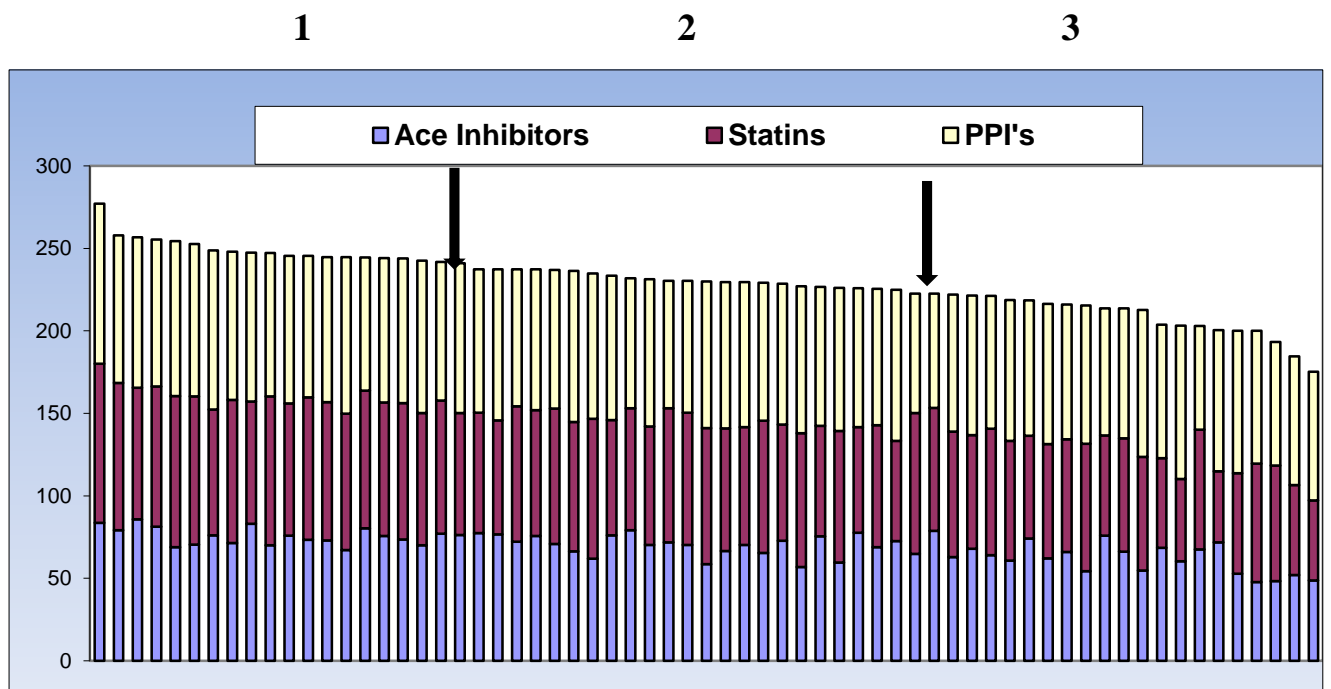


Figure 3.8: Combined Prescribing Productivity Opportunity Costs (BCBV) based on practice performance



Once selected from each third according to the five criteria outlined above, practices were listed in a spread-sheet and assigned relative numbers according to the five criteria in order to attain a range of participants and responses:

- **Size** – 1 equates to small and 3 to large practice size.
- **Ethnicity** – 1 equates to a low % South Asian population and 3 equates to high % South Asian population.
- **Deprivation** – 1 equates to low levels of deprivation and 3 equates to high levels of deprivation.
- **Clinical Productivity Performance Indicators** – 1 equates to low performance and high productivity opportunity costs and 3 equates to high performance and low productivity opportunity costs.

- **Prescribing Productivity Performance Indicators** – 1 equates to low performance and high productivity opportunity costs and 3 equates to high performance and low productivity opportunity costs.

A summary of selected practices (General Practitioners - GP and Practice Managers -PM) and respective levels for each of the five criteria discussed previous is presented in table 3.5.

Table 3.5: GP practices in NHS East Lancashire and respective selection criteria

PRACTICE (GP and PM)	Clinical Performance /BCBV	Prescribing Performance/ BCBV	LISI	% S. Asian	SIZE	Locality
GP - A	3	3	1	1	2	Burnley
GP - B	1	2	2	1	3	Hyndburn
GP - C	3	3	1	1	3	RV
GP - D	1	3	3	3	1	Pendle
GP - E	3	3	3	2	2	Burnley
GP - F	2	2	2	2	2	Pendle
GP - G	3	1	1	1	3	Rossendale
GP - H	3	1	1	1	3	Hyndburn
GP - I	3	2	2	2	2	Hyndburn
GP – J (Pilot)	2	2	2	2	1	Pendle
PM – K	3	1	1	1	3	RV
PM – L	2	3	2	2	2	Burnley

This approach enabled a range of practices to be selected across each of the five localities (Burnley, Pendle, Rossendale, Hyndburn and Ribble Valley) according to the criteria outlined in section 3.7.3.

ii. Selecting PCT Directors and Managers

PCT executive and non-executive directors were selected based on their corporate responsibility for organisational performance. Senior managers were selected based on their role and involvement in managing primary care performance in relation to use of the BCBV productivity performance indicators. Out of the six executive and non-executive directors invited to participate from East Lancashire PCT, all six accepted.

iii. Selecting SHA Directors

Strategic Health Authority directors and associate directors were selected based on their role and involvement in performance management in primary care in relation to the BCBV productivity performance indicators. Out of four invitees to participate three accepted and one delegated responsibility to an associate director who led on performance management in primary care.

Table 3.6 provides a summary of all participants who agreed to participate in the formal interview process.

Table 3.6: Summary of participants and professional characteristics

	GPs	Practice Managers (PMs)	PCT Executive Directors	PCT Non-Executive Directors	PCT Senior Managers	SHA Directors/ Associate Directors
Number	10	2	6	1	3	4

3.7.4 The Interview Schedule

The interview schedule was developed using the findings from the literature review and informal interviews. Throughout the process consideration was given to the underlying assumptions of the principal-agent theoretical framework and research objectives. The interview schedule was divided into five sections. The first was a general section on performance management to establish the basic understanding of the concept and terminology. The second section related to performance management and inter-organisational relationships. This was to understand the relationships that exist between managers and clinicians in primary care. A third section explored how performance management is used in the NHS. Use of performance management information to understand the practical and operational issues relating to improvement and variation in performance was the fourth area of discussion. Use of incentives and rewards was the final topic requiring further exploration. Each of these themes related to key findings from the academic literature and required further exploration to answer the research question.

Some of the challenges encountered during development of the interview schedule related to NHS organisational change that was ongoing at the time. Ensuring that questions remained relevant at the end of the study, while at the same time avoiding incorporating newly published information which might detract from the key objectives of the study was a key challenge.

During the pilot stage of the interview, it became clear that some of the questions could be merged, others removed completely and some questions needed to be re-organised to enable the interviews to flow more naturally in the line of questioning. The time allocated for the interviews was guided by the pilot interview enabling flexibility to run over while still remaining in the proposed limits outlined in the participant information sheet (see appendix 2). The interview schedule is available in appendix 1.

3.7.5 Participant Information Sheet

Alongside the interview schedule, a participant information sheet was designed as a question and answer document to provide participants with information about the study. The document covers details on who would be conducting the study, the aims and objectives, how the data would be collected, stored and confidentiality maintained, duration of the study, expected time commitment and details as to whether the study would be published. The participant information sheet was sent along with the letter of invitation to all invitees to participate. The participant information sheet can be found in appendix 2.

3.7.6 Consent Form

The research consent form received ethical approval from the North West Research Ethics Committee (REC). This had to include the following information:

- An opportunity for the participant to ask questions.
- Assurance that participants could withdraw from the study.
- Assurance that all data would be anonymised and that the formal semi-structured interviews would be audio-recorded and transcribed.

Each section of the form was completed, signed and dated by both the participant and researcher. Each retained a copy for their records. A copy of the the consent form is available in appendix 3.

3.7.7 Formal Semi-structured Interviews

Consent was attained to interview 26 participants in total: 10 GPs, 2 practice managers, 6 PCT executive directors, 1 PCT non-executive director, 4 SHA directors and 3 senior managers. Interview timescales ranged between 32 and 63 minutes with the average around 45 minutes. Each interview was held on NHS premises in a private and confidential setting. Interviews were audio-recorded and transcribed to increase reliability. Following each interview a copy of the completed consent form along with a follow up letter was sent to individuals who had participated in the study expressing thanks for their contribution and offering the opportunity to ask questions or contact the researcher if there was a desire to provide further information.

3.7.8 Data Analysis

Interviews were transcribed, coded and organised into themes using NVIVO 8 computer software. Matrix analysis techniques were used to summarise and theme the data accordingly. This technique was selected due to the amount of data requiring analysis and the ability to view a broad range of information at one time. Data was analysed using recurrent themes across different disciplines and respective comments as well as specific quotes which although occurred infrequently, contributed to the richness and depth of the findings.

3.8 Conclusion

The over-arching methodological framework shows the relationship between research philosophy, research methodology and research methods. The methodological philosophy relating to positivist and phenomenological paradigms is explained along with the respective characteristics and ontological assumptions. The information is used to explain reasons for selecting and rejecting particular paradigms and justifying the approach selected for the study. An explanation of the characteristics associated with positivistic and phenomenological paradigms provides valid and robust reasons for selecting case study methodology. Recognition of the limitations of case study methodology enabled particular techniques to be adopted and minimise potential problems.

The role and importance of theory in case study research is explained. A description of how the principal-agent theoretical framework is used to understand and explain the research question is provided. The theoretical assumptions of *goal alignment* and *information asymmetry* are two concepts used to explain the findings. The research methods used at different phases of the research process are described. Data on the Better Care Better Value (BCBV) performance scorecards and minutes of relevant meetings were analysed. Details on sampling techniques and the approach used to undertake the formal audio-recorded interviews are provided.

The interview schedule, participant information sheet and consent form are provided in appendices 1, 2 and 3 respectively. Data analysis involved using NVIVO 8 software and matrix analyses techniques.

Chapter 4

Findings

4.0 Introduction

The findings are drawn from a range of data including document analysis, informal interviews and formal recorded interviews. The documentation reviewed forms an important part of the data triangulation process associated with case study research. Section 4.1 summarises the Better Care Better Value (BCBV) performance framework developed by the NHS Institute for Innovation and Improvement in collaboration with partner organisations.

Analyses of the clinical and prescribing BCBV performance league tables available at the time identifies the position of NHS East Lancashire in relation to other organisations across the North West region. The scorecards analysed relate to the following three clinical indicators: (a) five procedures of limited clinical value (b) referral for outpatient appointments and (c) emergency admissions and the following three prescribing indicators: (a) prescribing of low cost lipid regulating therapy (b) prescribing low cost proton-pump inhibitors and (c) prescribing of low cost drugs affecting the rennin-angiotensin system. A more comprehensive description of the BCBV performance indicators is provided in section 4.1.1 and appendices 4 to 15 where the scorecards can be viewed.

Information attained locally from the informatics department and an electronic prescribing information monitoring tool known as ePACT.net allowed the same information to be broken down at practice level. This provided practice comparisons with national and PCT averages

and enabled comparison with other practices. This information is represented in graphical format and can be accessed in appendices 4 to 15.

Analysis of the minutes from PCT meetings relating to primary care performance highlighted the ongoing work within primary care in developing a *Practice Development Framework* (PDF). This had a range of objectives which are described in (v) of section 4.1.1.

The PDF steering group meetings highlight the intention to develop a Balance Score Card (BSC) to identify under-performing practices and enable comparison and benchmarking with other practices. An early version of the primary care BSC can be viewed in appendix 16.

Section 4.3 describes the relationship between the theoretical framework and thematic analysis of the findings. Section 4.4 provides a detailed analysis of the findings from the formal recorded interviews. Recurrent themes are represented as charts indicating frequency of responses according to discipline, particular theme and whether they are acting as the principal or agent. The shading in the charts provides an indication of the frequency of responses to particular themes across the different professionals. A block colour represents all respondents within a particular discipline and no colour indicates a nil response. As this is a qualitative study using a small sample the graduated shading reflects only an indication of the weight of responses to the common themes according to each discipline. It does not reflect numbers or percentages of responses from participants.

Findings are categorised into various themes and linked with assumptions of the theoretical framework. The three main themes are: (a) Understanding performance management in primary care (b) Use of performance management systems in primary care and (c) Barriers to performance management in primary care. Concepts emerging from these themes include:

- The relationship between managers and clinicians
- The relationship between autonomy and accountability
- Variance of understanding of performance management across professionals
- Variation in performance across agents
- Strategies to achieve goal alignment such as: stakeholder engagement, use of incentives and rewards and public release of performance data

These are explored using the two underlying assumptions of principal-agent theory: *information asymmetry* and *goal alignment*.

A final theme from the findings is that of future commissioning arrangements and how use of performance data may change in light of the new NHS reforms. This is discussed in section 4.7.8.

4.1 Documentation

Findings from a range of documentation are presented as part of the data triangulation process. The initial documents analysed are the Better Care Better Value (BCBV) performance scorecards. Its development and objectives are summarised. Analysis of the national clinical and prescribing BCBV performance league tables provides a ranking of East Lancashire PCT compared to other PCTs across the North West. This generated interest and ownership and facilitated discussion and debate with participants during the interview process. As well as the published documentation on the BCBV indicators the same information broken down at practice level provided practice comparisons.

The second type of documentation reviewed were the minutes from PCT meetings relating to primary care performance. Findings highlighted the on-going work within primary care in developing a *Practice Development Framework* (PDF). Key objectives of this framework were: to help practices improve quality by providing them with reliable information and identify development needs for improvement. Observing meetings and reviewing respective minutes highlighted the intention to develop a Balance Score Card (BSC). This would identify under-performing practices and enable comparison and benchmarking with other practices. The BSC incorporated a set of indicators linked to clinical priorities and disease areas such as Coronary Heart Disease (CHD), Heart Failure (HF) and diabetes. Statutory, contractual obligations, patient experience and public health measures were also captured within the scorecard.

The final documentation reviewed was that relating to the Quality and Outcomes Framework (QOF). The QOF constitutes a significant part of the GP national contract. It was originally negotiated between the British Medical Association (BMA) and NHS Employers and was introduced in April 2004 with the full agreement of all parties, including the Prime Minister's Office and the Treasury. From April 2009, the National Institute for Health and Clinical

Excellence (NICE) was given responsibility for developing a menu of recommended indicators for QOF that is used to inform negotiations between NHS Employers and the General Practitioners Committee (GPC) of the BMA on changes. NICE also has a role in prioritising areas for new indicator development, developing and selecting indicators for inclusion on the NICE menu of recommendations and consulting with individuals and stakeholder groups.

4.1.1 Better Care Better Value Performance Scorecards

The BCBV performance indicators are a range of performance measures developed by the NHS Institute for Innovation and Improvement in collaboration with partner organisations including: The Department of Health; The Health and Social Care Information Centre and others to help trusts identify potential efficiency savings.

The performance indicators are aimed at commissioners to help inform planning views on the scale of potential efficiency savings in different aspects of care and to generate ideas on how to achieve these savings. By stimulating ideas on where commissioners should focus their attention in re-designing and shifting services away from the traditional setting of the hospital and out towards community based care, the intention is to persuade commissioners to begin thinking of the *how* and *why* differences between organisations and help develop commissioning priorities for the various health communities. A key objective of these performance measures is to enable NHS organisations to provide the best quality care in the most efficient and cost effective way and to enable trusts to track their performance regularly and benchmark themselves against other organisations in order to improve.

The NHS indicators most applicable to the PCT fell into two areas: clinical productivity and prescribing. Findings from a review of the documentation on the three clinical and three prescribing productivity indicators are summarised in sections i to iii that follow. The relative position of NHS East Lancashire compared with other PCTs across the North West and equivalent practice comparison within the PCT is summarised. A comprehensive description of the methodology used to develop the indicators and details of the actual league tables for each performance indicator can be viewed in appendices 4 to 15.

i. Clinical Productivity

The first clinical productivity performance indicator refers to: *managing variation in surgical thresholds – relative level of surgery for 5 procedures of limited clinical value* (NHS Institute for Innovation and Improvement; 2009). This indicator showed whether the rate of operations for a basket of five procedures that took place to the expected number, so each operation was weighted in the indicator according to the relative level of activity. The procedures: myringotomy, hysterectomy, lower back surgery, tonsillectomy and dilation and curettage were selected because evidence based thresholds for when the surgery was likely to be effective were expected. A figure of 120 represented a 20% higher than expected rate. There was no correct rate of surgery, but in general high or low numbers may have suggested management of surgical thresholds could be improved. The data was published each quarter.

Out of 152 PCTs nationally, the variation ranged from 4 to 152 for PCTs across the North West with 16 out of the 24 in the North West falling within the *poorer than average* range with an overall opportunity cost of £16 million. NHS East Lancashire (NHS EL) was ranked 53 while a neighbouring PCT sharing a similar demographic profile and the same main provider trust was ranked 4 nationally. A more comprehensive analysis of this performance league table and respective rankings at regional (North West) level can be found in appendix 4. Out of the 67 GP practices in East Lancashire; 11 were above the NW average, 20 were above the national average and 29 were above the PCT average for this indicator. A more detailed analysis can be found in appendix 5.

The second clinical productivity performance indicator refers to: *managing variation in outpatient referrals – relative level of outpatient referrals* (NHS Institute for Innovation and Improvement; 2009) The ratio showed the level of first outpatient appointments compared to the level that would be expected given national rates and adjusting for the age, sex and need of the population. A figure of 100 meant that performance was in line with annual national average rates of appointment. The average rate for each quarter fluctuated around this figure with seasonal variations. A figure of 110 indicated a 10% higher level of referrals than expected. In general, high or low figures may suggest poor management of thresholds for referral. The data was published quarterly.

Out of 152 PCTs nationally, the variation ranged from 20 to 148 for PCTs across the North West with 19 out of the 24 in the North West falling into the *poorer than average* range with an overall opportunity cost of £22 million. NHS East Lancashire (NHS EL) was ranked 94 with a neighbouring PCT with similar demographic profiles sharing the same main provider trust ranking 66 nationally. A more comprehensive analysis of this performance league table and respective rankings at a regional (North West) level can be found in appendix 6.

Out of 67 GP practices in East Lancashire; 26 were above the NW and PCT average and 37 were above the national average for this indicator. A more detailed analysis can be found in appendix 7.

The third clinical productivity performance indicator refers to: *managing variation in emergency admissions – emergency admissions for 19 conditions* (NHS Institute for Innovation and Improvement; 2009). This indicator showed the ratio of actual emergency admissions to the expected level, given the age, sex and need of the population for 19 conditions. These conditions were identified as ones where community care could avoid the need for hospitalisation. A figure of 100 meant the level of admissions was expected, a figure of 110 meant a 10% higher level than expected. In general, the lower the rate of emergency admissions for these conditions the better, both for patients and the NHS. The data was published quarterly.

Out of 152 PCTs nationally, the variation ranged from 3 to 152 for PCTs across the North West with 21 out of the 24 in the North West falling into the *poorer than average* range with an overall opportunity cost of £106 million. NHS East Lancashire (NHS EL) was ranked 25 compared with a neighbouring PCT with similar demographics sharing the same main provider trust ranking 4 nationally. A more comprehensive analysis of this performance league table and respective rankings at a regional (North West) level can be found in appendix 8.

Out of 67 practices 32 were above the NW average, 50 were above the national average and 37 were above the PCT average for this indicator. A more detailed analysis can be found in appendix 9.

ii. Prescribing

The first prescribing productivity performance indicator refers to: *lipid modifications – percentage of low cost treatments* (NHS Institute for Innovation and Improvement; 2009).

At the time of the study, this indicator referred to the number of prescription items for low cost statins (simvastatin and pravastatin) expressed as a percentage of the total number of prescriptions for all statins (excluding combination products).

Out of 152 PCTs nationally, the variation ranged from 21 to 151 for PCTs across the North West with 21 out of the 24 in the North West falling into the *poorer than average* range with an overall opportunity cost of £23million. NHS East Lancashire (NHS EL) was ranked 92 while a neighbouring PCT with similar demographics sharing the same main provider trust was ranked 21 nationally. A more comprehensive analysis of this performance league table and respective rankings at a regional (North West) level can be found in appendix 10.

Out of 67 practices 10 fell short of the NW average and 26 fell short of the PCT and National average. A more detailed analysis can be found in appendix 11.

The second prescribing productivity performance indicator refers to: *Proton Pump Inhibitors (PPIs) – percentage of low cost PPIs* (NHS Institute for Innovation and Improvement; 2009).

At the time of the study, this indicator referred to the number of prescription items for low cost proton pump inhibitors (omeprazole and lansoprazole) excluding Zoton Fastabs and Losec MUPS, expressed as a percentage of the total number of prescriptions for all PPIs (excluding combination products for H.pylori eradication).

Out of 152 PCTs nationally, the variation ranged from 49 to 151 for PCTs across the North West with 17 out of the 24 in the North West falling into the *poorer than average* range with an overall opportunity cost of £4 million. NHS East Lancashire (NHS EL) was ranked 110 while a neighbouring PCT with similar demographics sharing the same acute trust was ranked 69 nationally. A more comprehensive analysis of this performance league table and respective rankings at a regional (North West) level can be found in appendix 12. Out of 67 practices 22 fell short of the NW average and 30 fell short of the PCT and National average. A more detailed analysis can be found in appendix 13.

The third prescribing productivity performance indicator refers to *Renin-angiotensin drugs – Percentage of low cost Angiotensin Converting Enzyme Inhibitors (ACEIs)* (NHS Institute for

Innovation and Improvement; 2009). At the time of the study, this indicator referred to the percentage of prescriptions written for ACEI (excluding combination products) expressed as a percentage of the total volume of prescribing for drugs affecting the renin-angiotensin system (excluding combination products). A high proportion of prescribing for ACEI meant lower prescribing costs.

Out of 152 PCTs nationally, the variation ranged from 32 to 151 for PCTs across the North West with 16 out of the 24 in the North West falling into the *poorer than average* range with an overall opportunity cost of £4million. NHS East Lancashire (NHS EL) was ranked 121 while a neighbouring PCT with similar demographics sharing the same acute trust was ranked 123 nationally. A more comprehensive analysis of this performance league table and respective rankings at a regional (North West) level can be found in appendix 14. Out of 67 practices 10 fell short of the NW average and 26 fell short of the PCT and National average. A more detailed analysis can be found in appendix 15.

It was recognised that given the timescale of the study, indicators pertinent to prescribing would change as drug patents expired and costs of equivalent generics would fall. However, the issue of appropriate prescribing according to clinical evidence and outcomes to gain maximum benefits for patients within available resources remains just as relevant today albeit using different measures. Important points to note relate not specifically to the indicators themselves but to variance of performance across organisations and practices, use of performance data to improve outcomes and barriers to improving performance and achieving goal alignment.

iii. Summary of findings from Scorecard Analysis

The findings demonstrate significant variation across PCTs and practices for both clinical and prescribing indicators. NHS East Lancashire (NHS EL) was ranked 53 out of 152 PCTs on managing variation in surgical thresholds, 94 out of 152 PCTs on managing variation in outpatient referrals and 25 out of 152 PCTs on managing variation in emergency admissions. A similar pattern of variation was noted with the prescribing indicators. NHS East Lancashire (NHS EL) was ranked 92 out of 152 PCTs on percentage of low cost treatments for lipid modification, 110 out of 152 PCTs on percentage of low cost Proton Pump Inhibitors (PPIs) and 121 out of 152 PCTs on Percentage of low cost angiotensin converting enzyme inhibitors

(ACEIs). These values varied with those of a neighbouring PCT sharing a similar demographic profile.

iv. Minutes from PCT Meetings

Examination of the minutes from the East Lancashire Practice Development Framework (PDF) Steering Group between February 2008 and April 2009 indicated that there was a desire to develop a standardised approach to performance management in primary care. This would involve development of a framework that could be used by the commissioners to monitor and manage primary care performance.

Membership and terms of reference of the group were agreed in June 2008. Membership consisted of primary care commissioning managers, GPs, representation from Public Health and Medicines Management and was chaired by the PCT Medical Director. The group intended to develop a Balanced Scorecard to identify under-performing practices and enable comparison and benchmarking with other practices.

While the approach was intended to be developmental and supportive it was recognised that in cases that demonstrated a lack of progress and improvement, there would need to be some form of remedial notice or contractual sanction. This would follow an escalation policy to be developed outside the PDF Steering Group.

v. PCT Practice Development Framework (PDF)

On reviewing the documentation from the PDF steering group, it became clear that one of the aims was to develop a Balanced Score Card (BSC). The objectives of the framework were to: develop a learning and development tool to enable practices improve quality, drive up standards and iron out health inequalities; provide GP practices with a portfolio detailing their achievement against contractual and development standards; strengthen existing management processes by making them more focussed on achieving and maintaining improvements in outcomes; and incorporating elements to formalise use of contractual sanctions where supportive mechanisms failed to produce significant improvement. It was hoped that by instilling greater clarity and consensus within GP practices and providing unambiguous feedback on progress towards standards, performance would improve. The framework also intended to identify underperforming or struggling practices that would prompt the need for support and a pro-active approach to recovery. The PDF was used to

provide assurance to the PCT Board that primary care performance was being monitored and performance and quality standards were being achieved.

A project initiation document outlining activities, timescales and progress of the developing framework was available to review. This included agreement of a proposed set of clinical indicators linked to PCT priorities such as Coronary Heart Disease (CHD), Heart Failure (HF), Stroke, Blood Pressure (BP), Diabetes, Chronic Obstructive Pulmonary Disease (COPD), Cancer, Atrial Fibrillation (AF) and smoking. The balanced scorecard (BSC) provided performance information around these clinical indicators in addition to some of the statutory, contractual obligations, patient experience, and public health measures. A sample of an early draft of the East Lancashire GP Practice Balanced Scorecard (BSC) can be found in appendix 16.

4.2 Informal Interviews

Eight informal, exploratory interviews were undertaken between March and May 2009 with two GPs, five senior commissioning managers and one Chief Executive. Findings from these interviews were used primarily to inform the interview schedule, described in section 3.7.4. Findings from this process were used in the discussion where common themes reflected those of the formal, recorded interviews and academic literature.

4.3 Relationship between Theoretical Framework and Thematic Analysis

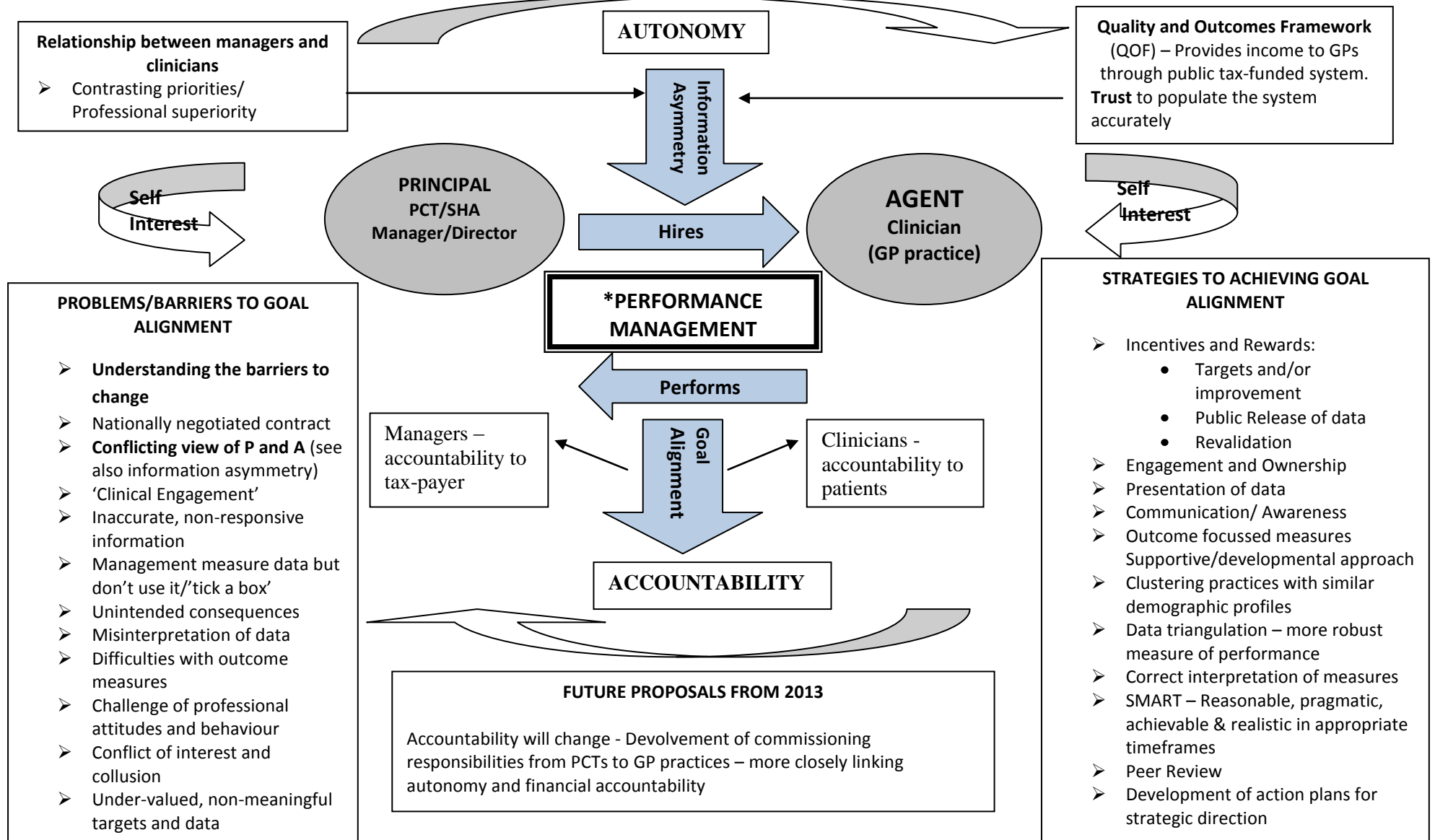
Findings from the formal, recorded interviews were themed and organised around the key assumptions of the principal-agent theoretical framework. The over-arching themes from the empirical findings are considered under the theoretical assumptions of *information asymmetry* and *goal alignment*. Understanding performance management and use of performance management systems are considered under the theoretical assumption of *information asymmetry*. Barriers to performance management are explained using the theoretical assumptions of *information asymmetry* and *goal alignment*. The relationship between managers and clinicians, conflict between autonomy and accountability, poor

stakeholder engagement and poor use of incentives and rewards all constitute barriers to performance management and goal alignment.

Another theme that emerged from the findings was that of future accountability and devolvement of commissioning responsibilities from PCTs to GP Clinical Commissioning Groups (CCGs). This may be due to organisational change and rapid implementation of the new NHS reforms taking place at the same time as the interviews. Themes that emerged from the findings of the formal, recorded interviews are summarised in figure 4.0 and represented in the context of the principal-agent framework.

Figure 4.0: Thematic Analysis of Findings in the context of the Principle-Agent Theoretical Framework

*Performance Management reflects: Importance of; awareness of; differences between measurement, management, variance and purpose.



The framework in figure 4.0 provides a summary of the findings from the formal, recorded interviews. These were used to categorise the findings into three themes: (a) Understanding performance management. This describes what performance management means to different professionals and how they perceive it working in the NHS (b) Use of performance management systems. This uses examples such as the QOF, the PDF and BCBV productivity indicators to describe how performance management is used in primary care, and (c) Barriers to performance management. This describes factors that affect performance management and goal alignment in primary care. These include: relationships between managers and clinicians, conflicts between autonomy and accountability, use of sanctions and rewards and stakeholder engagement.

The Better Care Better Value (BCBV) Productivity Performance Indicators were shared with participants to generate discussion on use of performance data. The information provided an understanding of the difficulties to implementing change and subsequent performance improvement. Difficulties referred to: lack of awareness, costs, variance, perceived importance, data presentation and subsequent use.

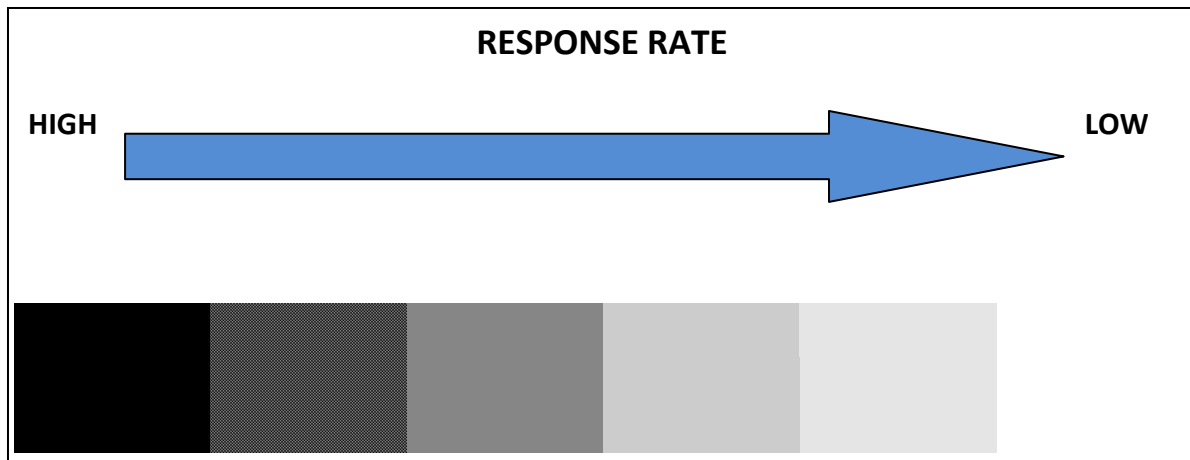
Findings in relation to the future NHS reforms and development of GP clinical commissioning groups were reported with a view as to whether the new arrangements going forwards would achieve goal alignment and improve performance.

4.4 Formal Recorded Interviews

Formal recorded interviews were undertaken between May 2010 and June 2011. Recurrent themes are represented as charts indicating frequency of responses according to discipline, particular theme and whether they are acting as the principal or agent. The shading in the charts provides an indication of the frequency of responses to particular themes across different professionals. Block shading represents all respondents within a particular discipline and no shading indicates a nil response. As this is a qualitative study using a small sample the graduated shading is an indication only of the weight of responses to the common themes according to each discipline.

Figure 4.1 is a diagrammatical representation of response rate according to particular themes. Block shading represents a high response rate with a gradual reduction in shading to a low response rate.

Figure 4.1: Diagrammatical representation of response rate according to theme



For example, figure 4.2 demonstrates that all SHA directors (represented as the principal) believed that the purpose of performance management was to achieve quality standards as indicated by the block coloured box. Unlike most GPs and practice managers, no PCT directors made reference to the purpose of performance management being to benchmark and compare with others as indicated by no shading in the respective box.

4.5 Understanding Performance Management

Although generally recognised that performance management was important, there were varying perspectives on how it should be carried out. Problems with former systems in primary care were explained by one Chief Executive:

“Prior to NHS performance targets, clinicians were non-corporate, patients were confused and the ‘value for money’ concept was varied and poorly understood.”

Three main categories emerged from the findings on *understanding performance management* and what the concept means to different professionals. These include: (a) benchmarking for comparison with peers (b) achieving objectives and quality standards and (c) consideration of softer performance information such as training, teamwork, communication and shared vision.

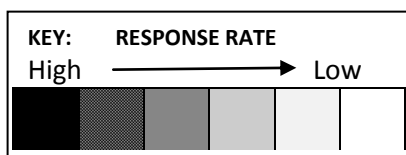
The majority of GPs related performance management to comparison with peers or benchmarking while the majority of managers believed that performance management was

about achieving quality, standards and objectives. Various interviewees made reference to the need to take account of softer performance intelligence such as training, staff turnover, multidisciplinary teamwork, communication and shared vision and values.

The fact that improving quality standards was commonly associated with performance improvement cross all disciplines suggests that there is an inherent belief that performance management automatically leads to quality improvement. These findings are summarised in figure 4.2.

Figure 4.2: Understanding performance management from different stakeholder perspectives

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Benchmarking/ Comparison with Peers					
Achieving quality standards					
Softer Measures eg. Training, teamwork, communication, shared vision					



Although importance of outcomes was mentioned by two clinicians and one manager there was a general consensus across both principals and agents that current systems and processes tend to focus only on numbers (measurement) rather than taking a holistic approach that would more accurately reflect performance. This concept was described by one senior manager:

“A clinically astute clinician may not be adequate in isolation; a good ‘all-rounder’ is what’s important.”

One clinician emphasised the need to adopt a more holistic approach to healthcare other than meeting targets. The *Quality Practice Award (QPA)*; an award developed by the Royal College of GPs was provided as an example. The QPA involves practices collecting a folder of evidence based on key quality indicators. Meeting centrally imposed targets was considered a barrier to achieving goal alignment between principals and agents especially as local commissioners have little influence over achieving such measures.

Several interviewees made reference to a need for consideration of softer performance intelligence for performance management to be successful. One PCT director referred to softer measures such as staff training and staff turnover that could affect performance:

PCT Director – *“Softer measures such as staff training and staff turnover need to be considered as much as harder measures as this can have just as important effect on quality of patient care.”*

Another PCT director acknowledged the need to look at proxy indicators across a care pathway rather than simply counting numbers:

PCT Director – *“There needs to be some audit of proxy measures across the whole pathway rather than simply counting the numbers.”*

One GP emphasised the need for management training to be incorporated into the GP training programme:

GP – *“There needs to be more responsibility and accountability built in at the GP training level...”*

Multidisciplinary teamwork was a recurring theme as described by the following interviewees:

SHA Director – *“You need a combination of clinicians, managers and patients...”*

PCT Manager – *“The PCT had a good multidisciplinary visiting programme involving clinicians, lay people and managers which was well accepted and clinically supported.... It is likely that there will still be a multidisciplinary team working closely with GP commissioners to include public health, prescribers and managers.”*

One CEO emphasised the need for better communication with respect to successful performance management:

CEO – *“There needs to be a dialogue between clinicians and managers and there isn’t nearly enough of that”*

The same CEO expressed the need for aligning values across individuals and organisations:

CEO – *“It’s the aligning of values that’s important.”*

4.5.1 Performance Management and Performance Measurement

Key themes that emerged from exploring differences between performance measurement and performance management include: (a) Measurement is a data collection exercise (b) Measurement involves collection of quantitative measures with no meaning (c) There is a greater focus on measurement than management and (d) Performance management involves using a more qualitative approach.

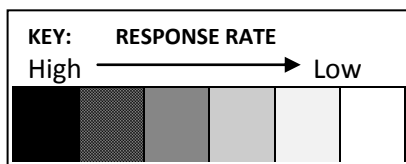
The majority of participants across all disciplines viewed *performance measurement* as a form of data collection for comparison and bench-marking purposes. There was a view that

although measurement needs to come first, quantitative metrics often have little or no meaning in isolation.

With respect to *performance management*, the majority of participants across various disciplines described the term as: using data to promote actions or change, to instil an improvement, or to achieve desired objectives. One SHA director referred to performance management as: “*measurement with a purpose*”. There was also a feeling that in contrast to performance measurement which was considered a quantitative approach, that performance management adopted a more qualitative approach. This information is summarised in figure 4.3.

Figure 4.3: Performance measurement and performance management

		PRINCIPAL			AGENT	
		PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Performance Measurement	Data Collection	High	High	High	High	High
	Quantitative Measures with no meaning	Low	Low	Low	Low	Low
Performance Management	More Focus on Measurements	Low	Low	High	Low	High
	Qualitative Approach	Low	Low	Low	Low	Low



4.5.2 Application of Performance Measurement and Management in the NHS

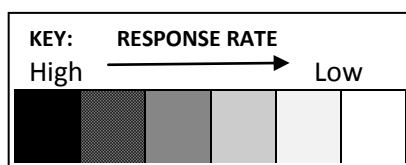
An overwhelming perspective from respondents indicates there is far more focus on performance measurement in the NHS than performance management. An explanation for this could be that it is more challenging to manage performance than it is to measure tangible markers and for this reason the NHS in general tends to focus on things that are easy to measure rather than on managing what is important. One practice manager felt that performance management was done well within the Quality and Outcomes Framework (QOF). Conversely another practice manager felt that performance management was done poorly across Primary Care:

“Performance management is not done well in primary care – we get lots of statistics and figures thrown at us and we go away and do our own management internally within the practice but in terms of external management – I don’t think there is much going on”

A summary of these findings is demonstrated in figure 4.4.

Figure 4.4: Application of performance management in the NHS

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
More Focus on Measurement					
Measurement is easier than management					



4.5.3 “Performance measurement provides no answers but inspires us to ask the right questions”

The majority of respondents agreed with the statement with a few commenting that performance measurement inspires us to ask *more* questions – not necessarily the *right* questions and one respondent felt that the word *inspires* would be better replaced with *requires*.

Although one commissioning manager felt that commissioners took a “*too light touch*” approach in managing primary care performance, it was generally recognised by both managers (principals) and clinicians (agents) that a facilitative, developmental approach that involved asking more questions was a more productive way of changing behaviour.

There was also a view particularly from SHA directors that often measures are not valid, agreed, research-based and not related to outcomes. Concern was expressed by the majority of SHA directors and some PCT directors that there is often a lack of understanding of data requiring answers too quickly which can result in jumping to the wrong conclusions. One GP provided an example of how data on referral rates could easily be misinterpreted:

“High or low referrals may not be right or wrong and can often be explained by a variety of factors such as: lack of confidence, incompetence, time constraints, special interest, and morbidity levels etc”

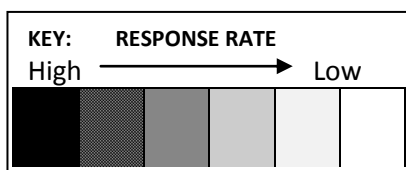
One SHA Director highlighted the importance of asking questions about performance data by referring to a recent example:

“You’ve got a high HSMR!” should be a question. “Not ‘why is it that your HSMR is so high?’”

Themes that emerged from the discussion according to discipline are summarised in figure 4.5.

Figure 4.5: “Performance measurement provides no answers but inspires us to ask the right questions”

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Generally agree					
Disagree					
Inspires us to ask questions but not necessarily the right ones					
‘Requires’ rather than ‘inspires’ us to ask questions					



4.6 Information Asymmetry

Information Asymmetry is an important theoretical assumption of principal-agent theory. This is used to understand the respective empirical findings. The two themes under which the findings are themed include: (a) Understanding the relationship between managers and

clinicians in primary care and (b) Exploring the relationship between autonomy and accountability.

4.6.1 Relationship between managers and clinicians

The majority of directors and managers believe that there is a tension between managers and clinicians in contrast with a lesser number of clinicians. Some PCT directors believe conflict exists because clinicians are not trained as managers and tend to focus on outcomes at an individual level whereas managers tend to place more attention on outcomes at a population level. There was recognition of the difficulty attaining an adequate mix of the two perspectives.

Two GPs commented that managers and clinicians viewed performance management from different perspectives and there is a lack of understanding and acknowledgment of the opposing viewpoint that often leads to mistrust between the two parties.

The majority of management participants (directors and managers) believe that a hierarchical relationship exists between managers and clinicians in primary care with clinicians holding what was described as a “*professional superiority*.” A number of management respondents felt it was difficult to challenge clinicians’ performance due to this *professional superiority*.

One director commented:

PCT director - “*A manager is subservient to the clinician because they cannot exercise enough clout over a GP. This isn’t how it should be – any other provider would require a service specification, outlining monitoring requirements, performance review, improvement and sanctions when standards fall.*”

Another director commented:

PCT director - “*The medical profession has a natural professional superiority through academic and professional qualifications which implies a higher level of attainment.*”

One practice manager felt that PCT management had not listened to clinicians and that the former Primary Care Groups (PCGs) that existed prior to PCTs were far more effective at listening and joined up working. Other respondents believed that the relationship was non-hierarchical and supportive and one PCT director felt strongly that the relationship should be synergistic with mutual accountability between the two.

Preference was expressed by clinicians to be challenged on clinical areas of performance by individuals with the relevant clinical expertise which provided credibility, rather than general PCT managers not trained in a particular field. The example provided was primary care prescribing being challenged by pharmacists.

Reference was made by various respondents to the fact that the QOF (Quality and Outcomes Framework) was the main performance management tool used in primary care and it was around this framework where most contact between GPs as independent contractors and PCT commissioning managers was made. The only aspects of performance management mentioned by GPs as being relevant to them was QOF and the local and national enhanced services all of which are associated with significant financial rewards.

One GP commented:

GP - "Clinicians see performance management as managerial and target driven/hoop jumping and they have very little respect for that approach....."

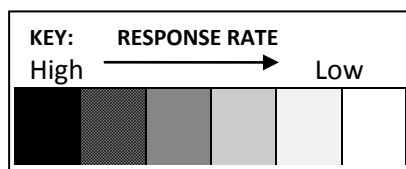
One example provided was the 18 wk target which was described as being only in the interest of the manager with nothing to do with patient outcomes:

PCT Manager - ".....the 18 wk target is only in the interest of the manager. It has nothing to do with patient outcomes. Clinicians are interested in ensuring patients with the most severe problems are given priority so there's a conflict between clinical priorities and access targets"

A weighted summary of the responses is provided in figure 4.6.

Figure 4.6: Relationship between clinicians and managers in primary care

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Difficult/ Fraught Relationship	Dark Grey	Dark Grey	Light Grey	Light Grey	Dark Grey
Hierarchical Relationship	Black	Dark Grey	Dark Grey	Light Grey	Dark Grey
Light- touch/supportive approach	White	White	White	Light Grey	White
Professional Superiority	Dark Grey	Dark Grey	Light Grey	Dark Grey	Dark Grey



4.6.2 Autonomy and Accountability

The majority of GPs believe that *accountability* and *autonomy* should go ‘*hand-in-hand*’. Most described the term *accountability* as being ‘*answerable*’ and the term *autonomy* as ‘*devolved power or having the freedom to act*’.

GPs and practice managers viewed accountability in the context of their patients whereas the PCT and SHA managers referred to accountability as ‘*being accountable to the tax payer*’ and having the ‘*responsibility for public money*’.

Like the majority of GPs, most managers and directors felt that although autonomy and accountability should go together there was a conflict between the two as they do not naturally sit well together due to the professional tension.

Reference was made by PCT and SHA directors to the future NHS Reforms with respect to devolvement of budgets and clinically led commissioning arrangements. There was a perception of lack of recognition of new responsibilities and accountabilities by GPs and reluctance for GPs to take on such significant responsibilities equivalent to that of PCT Chief Executives. One PCT director quoted:

PCT Director 1 - *“It’s impossible to have someone not employed by an organisation being held to account with corporate responsibility especially when they have a vested interest in driving their bottom line.”*

Another PCT director said:

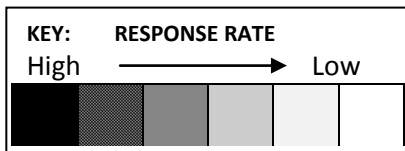
PCT Director 2 - *“Historically commissioning models have allowed clinicians to step back from the accountable structure. Although the White Paper offers a degree of autonomy and flexibility it also requires accountability to ensure outcomes are delivered. It all feels rather high risk; untried and untested.”*

Some GPs made reference to micro-managing clinicians as being counter-productive, stifling innovation and deterring progress which would ultimately damage the profession in the long term. In contrast one GP felt that there ought to be greater accountability and less autonomy applied to poor performing practitioners; both financially and clinically.

A summary of the weighted responses is presented in figure 4.7

Figure 4.7: Relationship between autonomy and accountability

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Accountability and Autonomy should co-exist	Dark Grey	Medium Grey	Dark Grey	Light Grey	White
There is a conflict between Autonomy and Accountability	Dark Grey	Medium Grey	Dark Grey	Light Grey	White
GPs hold no accountability in the current system	Dark Grey	Medium Grey	Dark Grey	Light Grey	Light Grey



4.7 Goal Alignment

A second important assumption of principal-agent theory, outlined in figure 4.0 is that of *goal alignment*. The empirical findings are themed according to this assumption of principal-agent theory.

The majority of participants from a clinical or management background believe it is important to link performance measurement to organisational vision and objectives. However there was a perception across the range of disciplines that this was done poorly in the NHS as a whole.

The majority of managers and clinicians cited the importance of linking performance measurement to organisational vision and objectives as the need to provide assurance that

objectives were being achieved and allow strategic changes to be made if the objectives were not being met.

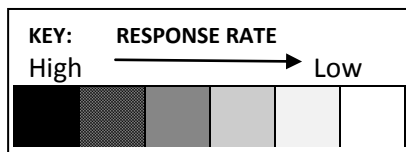
One GP quoted:

GP - *“It’s currently very difficult to have a clear vision at the moment because there is a lot of change and confusion in the NHS but generally as a practice/organisation, we do have to have a vision. In classic business planning terms you need to know where you are before you can determine where you want to be and then how you are going to get there.”*

A summary of weighted responses is presented in figure 4.8.

Figure 4.8: Importance of linking performance measurement to organisational vision and objectives

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Important to link performance management to organisational vision and objectives					
Important to monitor progress against goals and change plans when required					



4.7.1 The Quality and Outcomes Framework (QOF)

The majority of participants across the range of disciplines believed that the NHS focused more on performance measurement than performance management and the terms are often used interchangeably. Reasons offered to explain this from a range of GPs and managers include:

GP - *“measurement is easier”*

PCT Director - *“there is a focus on things that are easy to measure rather than what’s important”*

PCT Manager - *“management is more challenging”*

Every GP and practice manager referred to the Quality and Outcomes Framework (QOF) when asked about current performance indicators used to assess performance in primary care. In contrast no PCT directors or managers referred to QOF in this line of questioning. The majority of GPs felt that aside from the QOF, other primary care performance indicators were not relevant to GPs.

A summary of the weighted responses is presented in figure 4.9.

Figure 4.9: Performance management and measurement frameworks

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
More focus on measurement than management					
QOF – Main performance framework relevant to General Practice					



Although there was recognition that QOF had been a good start to help standardise practice, some GPs felt that aspects could be improved:

GP - “QOF indicators for diabetes and epilepsy has enabled a standardised approach and identification of patients who were perhaps not previously being reviewed”

It was felt that other QOF indicators were not good measures of quality or improved patient outcomes:

GP - “Depression scoring is not a good QOF indicator – that’s not the way to diagnose depression”

GP - “Patient experience questionnaire is very questionable. It is very subjective, unreliable and involves such a small number of patients within a practice. It really is not a meaningful performance measure”

Reference was made to use of inappropriate strategic behaviour potentially resulting in unintended consequences:

GP - “When developing performance frameworks there is often a lack of recognition that people will game the system. Similar to restricting certain treatments by setting criteria, but as soon as that criteria becomes common knowledge an individuals’ eligibility changes in order to meet the criteria”.

PCT Manager - “24/48hr primary care access targets simply made GPs restrict booking and access in order to meet the target. Thus the desired outcome was not achieved and resulted in poor patient satisfaction”

Other examples of performance indicators provided by various participants were:

PCT Manager - “Childhood immunisation and vaccination targets – has a good evidence base which if achieved will deliver the desired outcome of prevention of a pandemic or epidemic”

SHA Director - *“Thrombolysis and stroke – Administered within 3 hours will provide benefit; 3-4 hours may provide some benefit; >4hours will provide no benefit”*

PCT Manager - *“The 4hr access target had good intentions to diagnose, treat and discharge quickly however analysis of results and decision making may take longer than 4 hours which would be considered a breach of the target so to avoid breaching the target patients were often admitted which resulted in large numbers of zero length of stay which cost more money as well as unnecessary bed-blocking for patients who needed to be admitted – simply to hit the target”*

4.7.2 Problems and Barriers with Performance Management Systems

Reference was made in response to various questions to PCTs having limited contractual ability to *truly* performance manage General Practitioners. An explanation for this is that GPs are independently employed by the NHS through a nationally negotiated contract. It is very difficult to get clinicians working in primary care to achieve targets that they do not own without adequate incentives to do so.

The Practice Development Framework (PDF) was referred to on several occasions by a range of managers and clinicians. Although, considered a step forward for improving performance in primary care, it did receive criticism from one GP for being: *“divorced from frontline services, too mechanistic and policy driven”*. The framework was considered by one GP for being too heavily focussed on health and safety and compliance with particular policies rather than on patient outcomes.

Problems and difficulties highlighted by interviewees with performance indicators in primary care included:

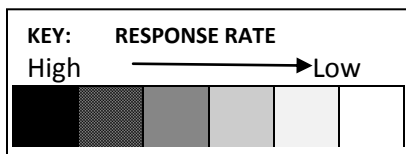
- a) A lack of sophistication and understanding of the measures and terminology used.
- b) Measures often resulted in unintended consequences and perverse behaviour.
- c) Measures were often not valid, agreed or research-based and not related to patient outcomes ie. There is a tendency to measure what is easy rather than what is right.

- d) There was poor understanding of the data with demands for quick answers. This led to jumping to wrong conclusions. It is essential that performance indicators are interpreted correctly.
- e) There were problems with timescales associated with outcome measures.
- f) There were too many indicators and too much time spent collecting data: “*feeding the beast*”, “*playing the game*”, “*chasing targets*” and not enough time spent using the data to improve patient care.
- g) There was a risk of concentrating only on those things measured (that usually resulted in a financial incentive) at the risk of neglecting other important things with no associated financial reward.
- h) Clinicians found it difficult to find time to engage with performance management outside of clinical commitments.
- i) It was a challenging task for managers to engage clinicians in the process of performance management.

A summary of weighted responses is presented in figure 4.10

Figure 4.10: Problems and barriers associated with performance management

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Lack of sophistication and understanding or misinterpretation of measures	Dark Grey	Medium Grey	Dark Grey	Light Grey	White
Often leads to unintended consequences	Medium Grey	Medium Grey	Dark Grey	Light Grey	White
Poor measures are often related to poor outcomes	Medium Grey	White	White	Light Grey	White
Too many performance indicators or targets	Dark Grey	Dark Grey	Dark Grey	Light Grey	Medium Grey



One CEO recognised the difficulty in agreeing an optimum suit of performance measures:

“There will never be universal agreement on the perfect suit of measures due to a continuous developing system involving human beings and the ability to generate and understand is always changing. Current practice and measures mandated by a system will always be a few steps behind optimum. There is always a trade-off between reliable, universal coverage and

innovation. The system constantly changes priorities leaving a difficulty in developing and implementing measures which catch up and address the new priorities”

Two GPs were critical of the current system of performance management and the measures used in that process:

GP1 - *“Most indicators are designed with different functions in mind – the question should be: ‘are the indicators really achieving their aims? The other question is: ‘is it a good use of public money?’ – the new GP contract resulted in a huge amount of public money being thrown at trying to improve standards of care which were already being achieved!”*

The same GP provided examples of how performance indicators can result in unintended consequences: QOF generates a payment for placing 95 year olds on ACE inhibitors who may not be best served by such an intervention. An example provided of an unscientific, non-evidenced based intervention within QOF is the anti-coagulation indicator for atrial fibrillation. At the time of the interviews, this measure did not distinguish between aspirin and warfarin despite significant differences in outcomes thus resulting in an indicator which incentivises clinicians to use the wrong drug. Although such barriers exist in performance management in primary care, there is recognition that the QOF can be a motivational device for change and improvement providing intentions are clear and indicators are considered valuable.

GP2 - *“Indicators are often developed as a knee-jerk reaction to a situation. Performance measurement has gone too far. My daily performance should be acceptable through my own professional obligation. It should be tied into professional re-validation rather than having to spend time on top of a 70 hour week dealing with performance indicators which erodes quality of life and makes a lesser professional”*

Two other GPs highlighted the difficulties engaging with performance management today compared with two decades ago due to lack of dedicated time:

GP3 - *“When I first came here 20 years ago; every Friday lunchtime we had a two-hour clinical meeting every week between the three or four practices in this locality. We would look at PACT data as a group, we would have consultants coming out to talk to us. We tried*

to resurrect it but people just don't turn up because there isn't the time in the day any more. So these kind of things get squeezed because of frontline clinical work. It's not seen as part of the job so it lacks credibility".

Another GP commented:

GP4 – *"It's important to have data which is easily accessible then having the discussion with peers to actually do something with it. Time is a pressure because work continues as normal at the coal face so fitting it is a problem. It helps to have the medicines management support but even so the doctor still needs to go through the list and talk to the patients individually. I feedback prescribing data and referral data to the partners but often need some help in analysing and synthesising the meaning of the data"*

Two SHA directors were critical of using proxy measures for assessing performance. It was considered that such measures do not provide a true reflection of performance:

SHA Director 1 - *"Often proxy measures are used which do not give a full picture, for example: '90% of patients spending time on their stroke unit' is the actual indicator used to measure performance when really we should be looking at whether patients get aspirin; a CT-scan; thrombolysis; swallowing assessment to avoid aspiration and pneumonia all with a balance on how often such interventions ought to be measured"*

SHA Director 2 - *"Dashboards are being developed by PCTs which include very distant proxy measures that don't get to the heart of whether a service is delivering what patients want"*

A non-executive director commented on the difficulty when making comparisons in health care:

"Performance management can be helpful if you are comparing 'like-with-like' but the problem with health is the range of environmental factors which are not considered. Crude data doesn't take into consideration these factors."

4.7.3 Degree of Engagement of Managers and Clinicians

Most GPs and one SHA director felt there was a professional tension between clinicians and managers that contributes to the lack of engagement with performance management. One GP commented:

“As clinicians we tend to focus on patient outcomes and retaining professional autonomy whilst managers want to control”

Another GP referred to the difficulty for managers to have an impact on professional accountability when they are not part of that profession:

“Most clinicians are not aware they’re being performance managed because in primary care it is a very ‘hands off’ approach until the data is used and questions are asked.”

Two GPs believed that performance management should be undertaken by a clinician who understands both the clinical and management issues. Respondents across the range of disciplines did not feel that clinicians were engaged at all with performance management. Two PCT directors felt that because performance management was not something GPs are trained in then it is not something that concerns them. Another PCT manager and one SHA director believed that performance management is often seen as threatening to clinicians. One PCT manager felt that clinicians tend to be very sceptical of performance measures and if they do not fall within a perceived acceptable range then they seek ways to discredit the data.

There was a variable response as to the perceived degree of engagement of clinicians with performance management. A belief, particularly from management existed that a few self-promoting clinicians, often those who had taken on leadership and clinical roles within the PCT tended to represent the professional body at large. This always risks not engaging the right clinicians. One GP and two PCT directors felt that clinicians were beginning to become more involved with performance management however from their perspective it appeared to be more of a reactionary process by invitation that is often too late, rather than proactive engagement.

There was a variable response across all disciplines relating to the degree of engagement of managers in performance management. One PCT director referred to the increase in numbers of national targets over the last few years where PCTs have been performance managed against a defined set of standards. An example cited was the *World Class Commissioning* performance framework.

One GP commented that managers are probably more engaged than clinicians but in his opinion the question should really be:

GP - *“Is performance management being used for the right purpose?”*

This perspective was corroborated by a SHA director who felt that whilst managers go through the motions of performance management, they don't often understand how they might use the information effectively.

One Chief Executive commented:

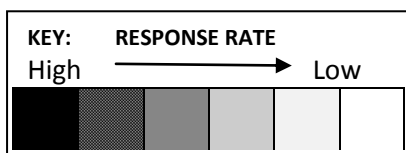
“We need to get better at generating information in primary care. Currently some of the discussions about who's accountable for what and how information is used feels archaic....”

A summary of weighted responses on the findings from exploration of engagement of managers and clinicians with performance management in primary care is presented in figure 4.11.

Responses are weighted according to various perspectives on the degree of engagement of managers and clinicians with performance management. Most GPs and managers felt there was limited engagement by clinicians with performance management compared with a much greater engagement from managers.

Figure 4.11: Engagement of managers and clinicians with performance management

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Difficulty engaging clinicians due to professional tension					
Currently - no engagement with performance management (PM) by clinicians					
Currently - variable or partial engagement of clinicians with PM					
Currently - full engagement of managers with PM					



4.7.4 Use of Performance Data in Primary Care

Examples were cited from the various disciplines on how performance data was used in primary care to promote change. A higher ratio of clinicians to managers cited use of prescribing data to promote a change in prescribing behaviour. Directors and managers referred to pathway re-design and referral data. GPs and primary care commissioning managers cited use of QOF data to improve patient outcomes.

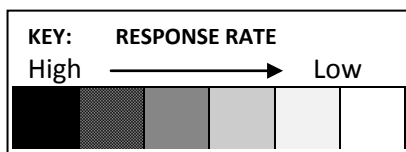
Use of public health performance data to improve outcomes was given as an example of where data has been used to promote change. This involved a targeted approach to increase vaccination uptake and use of data to rank '*years of life lost*' at a locality level.

Use of clinical audit to improve outcomes for patients through revising the end-of-life care pathway was one example where use of performance data resulted in change. Use of practice review meetings is another example of where performance information had been used to promote improvements through reviewing appointment systems and improving access. GPs and practice managers made reference to using significant event information to improve performance.

A summary of weighted responses on the findings from examples where use of performance data had been used to promote change is presented in figure 4.12.

Figure 4.12: Examples of how performance data can promote change

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Use of prescribing data	Light Grey	White	Dark Grey	Dark Grey	Dark Grey
Service re-design and use of referral data	Dark Grey	Dark Grey	Dark Grey	White	White
QOF data as an example to improve outcomes	White	Dark Grey	White	Dark Grey	White
Use of public health data to promote change	Light Grey	White	Dark Grey	White	Dark Grey
Clinical audit/ Practice review meetings	White	White	White	Dark Grey	Dark Grey
Significant event audits and complaints review	White	White	Dark Grey	Light Grey	White



One Chief Executive cited an example where the cancer target was not being achieved:

“An example in primary care is where patients were not being seen within the two week time frame for cancer. A process was set up where for real time for one month patients were seen

as they came in and follow up conversations took place between the surgeon and GP. Every single patient's results were timed for a month and at the end of that period a meeting was held and debate took place which resulted in changes to the way in which information was collected and changes to protocols which were made more robust"

A specific example cited by one GPwSI (GP with a special interest in cardiovascular disease) was using clinical audit and review of patients with cardio-vascular disease:

"Using benchmarking and audits on CVD then feeding back the results to practices with recommendations, then measuring a year on to see if the standards have improved at an individual level. As a GPwSI I try to influence what clinicians do through the letters I write to their patients"

Another GP provided an example from using QOF data in epilepsy:

"With QOF we have tightened our reviews in epilepsy patients and learnt not to be afraid to refer patients or adjust medication. Rather than accepting that the patient might have two fits a month then we question it and try to eliminate the fits completely. One patient even ended up being able to drive which made a huge difference to her"

One GP cited the use of significant event information to improve the end-of-life pathway:

"Looking at significant event information I introduced a system whereby forms are completed when a patient under palliative care dies. The forms are quite explicit and are discussed at bi-monthly meetings to identify any problems which occurred and to put things in place to avoid future problems. Our end of life pathway has improved, partly as a result of analysing what went well but perhaps what could have been done better"

A PCT director commented on the improvements made in prescribing:

"One of the most stark measures that has produced changes is through the MMT and prescribing. Over the past 10 years we've moved on considerably in terms of providing support to practices on prescribing and how we've refined prescribing performance data

which is well received by practices. Data is now shared amongst colleagues which didn't used to be the case. Practices are very keen to look at their own performance and see how they compare with others. The evidence that this works well is perhaps a model which could be transferred to other areas of primary care"

An example using referral data was cited by a PCT manager relating to service re-design in dermatology:

"We captured a year's worth of referral data for dermatology and triaged the diagnoses to see if patients could be safely managed in a non-acute setting. Findings showed 55-60% didn't need to be referred to the acute hospital. This evidence validated our argument for transferring 40% of activity from the acute into an intermediate service hence the subsequent procurement"

Another PCT director used an example of orthopaedic referral data for interventions considered low clinical priority:

"Orthopaedic referral data was used to demonstrate a high level of intervention, lots of low value added procedures and a very low length of stay. This prompted discussions with the hospital clinical teams and GPs"

One PCT manager explained how use of performance data relating to exception coding improved outcomes:

"A couple of practices stood out as being high on exception coding when compared with all other practices. On further investigation, it was discovered that these practices were not following the rules. It was highlighted that they were disadvantaging these patients and creating health inequalities because they were not being called in for review. The following year, levels had dropped to the PCT average"

Another example cited by a SHA director referred to the World Class Commissioning (WCC) performance framework:

“WCC assurance reviews and reports outlined where PCTs needed to improve their performance. Re-assessment demonstrated that almost everybody’s achievement had improved albeit at different speeds in different areas. The problem with the outcome element of the framework is that it takes more than 10-12 months to see an improvement in outcomes and now that WCC is gone, the cycle was never completed to say that good governance and high competence led to good outcomes”

4.7.5 Better Care Better Value (BCBV) Performance

Indicators

BCBV performance data was shared with participants to explore their understanding of performance data and how it was used in primary care. Findings from this discussion are categorised into various themes according to frequency of response to a particular theme. These include: (i) Awareness of performance indicators among participants (ii) Awareness of productivity opportunity costs associated with the indicators (iii) Understanding reasons behind the variation across organisations and practices (iv) Understanding the meaning and importance of the performance indicators to individual participants (v) Whether presentation of data affects the way it is used.

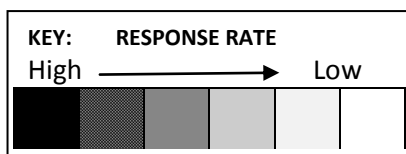
i. Awareness

Although most PCT and SHA directors were fully aware of the BCBV productivity performance data only a minority of GPs in comparison were familiar with the data. Despite directors being aware of the indicators only a fraction were aware of the PCT ranking compared with other PCTs. Most GPs were aware only of the prescribing, not the clinical indicators. Some participants were partly aware of the data, some were unsure and others were aware of the data but not the ranking compared with other PCTs and/or practices.

A summary of weighted responses on the awareness of the BCBV productivity performance framework is presented in figure 4.13.

Figure 4.13: Awareness of the BCBV Productivity Performance Framework

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Fully aware of BCBV performance data	Dark Grey	Medium Grey	Black	White	Dark Grey
BCBV performance data or ranking compared with others	White	White	White	Dark Grey	Dark Grey
Partly aware or unsure	White	Dark Grey	White	Dark Grey	Medium Grey
Never seen in format presented and shared	White	Dark Grey	White	Medium Grey	Dark Grey
Aware only of prescribing BCBV indicators	White	White	White	Dark Grey	Dark Grey



One GP commented:

“I’ve not seen this sort of stuff, I suspect I have seen some of the prescribing stuff but the PCT has not shared this information with us in this format that I recognise”

Another GP confirmed his lack of awareness of the clinical BCBV productivity indicators:

“I wouldn’t have an idea of where we are in terms of the five surgical conditions. I would like to think that we were low in terms of emergency admissions to hospital and would be very surprised if we weren’t below average. I know that we are above average in terms of prescribing low cost statins and PPIs”

One of the PCT directors commented:

“What is interesting there, is why there are big differences between ourselves and our local PCT given that we share the same main hospital provider and we have a population that’s broadly similar”

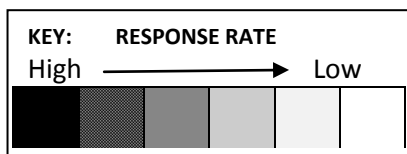
ii. Cost

Practically all the PCT and SHA directors and managers interviewed were aware of the productivity opportunity costs associated with the BCBV indicators compared with no GPs or practice managers. There were requests across all disciplines during the interviews for some explanation of what the data meant. This supports the earlier comments in 4.5.3 that performance data should be used to ask questions and seek explanations for variance.

A summary of weighted responses on the awareness of the productivity opportunity costs associated with the BCBV productivity performance framework according to different professionals is presented in figure 4.14.

Figure 4.14: Awareness of productivity opportunity costs associated with BCBV Productivity Performance Framework

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Fully aware of opportunity costs associated with BCBV performance data	Black	Dark Grey	Black	White	White
Request for an explanation of the meaning of the data	White	Light Grey	White	Dark Grey	Dark Grey
Importance of using the data to ask questions and seek explanations	Light Grey	White	Dark Grey	Light Grey	White



One SHA director commented:

“One of the limitations of this performance data is to compare with the NW region. Recently we’ve use the Quality and Productivity Calculator (QPC) to find comparable PCTs with similar demographics. One of the excuses made by us is: ‘well we don’t perform badly compared to the NW’ forgetting the NW compares really badly. Then the argument goes on: well the NW is poor and has poor health but the NE is actually poorer yet has better

outcomes! It's really important to use this data and we're starting to but I don't think commissioners generally have used it much in the past."

Another SHA director highlighted some of the difficulties and challenges in interpreting the data and implementing subsequent changes:

"There's a lot of work done on looking at variability to bring back to average and saying – 'well if we get rid of variability this is how much we'll save', particularly on things like outpatient attendances or urgent hospital admissions, but quite what average should be for any one health community is quite a challenge to work out....."

The same director continued to cite examples of potential challenges and explanations:

".....also what alternatives are being provided to manage those patients, because there is a presumption that; let's take outpatients, that any PCT with an above average outpatient attendance rate, then those patients must be able to be managed in some different way which will save costs. What you don't know about other PCTs, is how they are managing those patients and what other services they have available? Do they have more services that they have contracted for in primary care? Do they spend more on primary care than the PCT that's got the higher cost of outpatient referrals? So there are a range of variables. Then the difficulty comes in changing the behaviour of those GPs to behave differently."

The concept discussed in 4.5.3 on use of performance data to ask questions was supported by another SHA director, explaining that there could be valid reasons for a particular level of performance. Although the information may be considered helpful in enabling managers and clinicians to come together, he stressed the importance of understanding the consequences of changing practice with respect to costs and potential impact this might have on budget holders:

"It's about using the data to ask questions: Why is it that you've got worse by 33 points? What's happening now that has changed? Why does it appear that you are doing more procedures of limited clinical value than previous? Has anything changed to make this happen? It's not about saying they're wrong but about saying – why is this happening because there may be a good explanation for it."

The same director elaborated his point further emphasising the importance of fully understanding the data:

“The important value on this data is that it gives you the potential monetary saving so if you invest time and effort into this, x level of savings can be generated. It’s a really helpful way of putting managers and clinicians on the same page very quickly...”

“.....It’s also important to consider the explanations for a particular ranking as well as the implications and consequences which may result from asking the questions. It may mean changes in clinical and administrative procedures or doing more for the same money. Costs to the PCT may increase if additional time is freed up from outpatient appointments to undertake more procedures which cost more. So you have to think through what that would mean for all stakeholders – clinicians, budget holders and managers and understand the implications.”

One GP asked why practices did not receive this data at practice level:

“Is there a reason we don’t get this information at a practice level – the information about operations and outpatient statistics?”

A non-executive director asked how the data actually impacts on clinicians:

“What I find interesting about this is how does it impact on clinicians because clinicians could virtually ignore this couldn’t they?”

iii. Variance

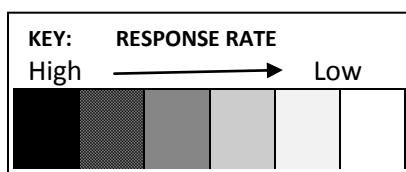
There was recognition by most interviewees across all disciplines that there would always be variation in performance across practices and organisations with respect to the productivity performance outcomes. Reasons for variation were: (a) Historical custom and practice. This included a lack of desire to keep up to date with training and education and resistance to change (b) Differences in practice organisation and infrastructure. An example cited recurrently was that of single-handed GPs being denied the luxury of having other partners to obtain a second opinion prior to referral (c) Lack of confidence and uncertainty with

diagnoses (d) Patient demand and social factors including levels of deprivation and prevalence of disease.

A summary of weighted responses of explanations provided for variance in performance across practices and PCTs according to various disciplines is presented in figure 4.15.

Figure 4.15: Explanations for variance of performance across practices and PCTs

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Historical Custom and Practice	Dark Grey	Dark Grey	Medium Grey	Light Grey	White
Differences in organisation and practice infrastructure	Dark Grey	Medium Grey	Dark Grey	Dark Grey	Medium Grey
Lack of confidence among clinicians	White	White	Medium Grey	Medium Grey	Medium Grey
Patient demand	Light Grey	White	Dark Grey	Medium Grey	Medium Grey
Social factors/ Disease prevalence	Medium Grey	Light Grey	Medium Grey	Dark Grey	Black



A Chief Executive stressed the importance of understanding the data by referring to an example that could impact on variance of performance across practices:

“Expanding supply induces demand. For example, appointing more doctors, setting up more functions in hospital results in expanding capacity. Growth in consultant referrals has dramatically outstripped GP referrals. That’s the point about understanding the data. Many PCT initiated demand management schemes have been ineffective in that patients still end up going to hospital or they’ve simply met unmet needs that previously existed.”

Two GPs provided examples of how confidence and experience may affect referral rates:

GP 1 - *“Newer doctors refer more than older doctors. We learn to leave things alone and just wait and see”.*

GP 2 - *“An individual clinician will always give you a reason for referring a particular patient at an individual level. More importantly the question should be: Why did you refer 20 people with neck pain to physiotherapy when most practices only refer 5?”*

Another GP provided examples of *excuses* often used by clinicians to explain the data and emphasised the need for GPs to take more responsibility for the outcomes of their patients:

“As a GP it’s easy to blame your patients – they’re really unhealthy; they smoke too much; they drink too much or they’re really badly off so don’t come and see me. Social demographics are part of it but the major part is the way primary care operates in different practices. GPs can influence patient’s behaviour of A&E attendances by equipping them in the first place to deal with things.”

“..... If you run a decent general practice and patients have faith in your judgement and opinions then I believe you can level out this variation more effectively. In deprived areas often with a high ethnic population, although health needs are greater and you have the inverse care law where you get: fewer GPs, difficulty recruiting GPs and lots of less effective practices with older, single-handed GPs – all well described as being less effective ways of running a practice. GPs need to take some blame because there are some practices in deprived areas with better outcomes – proof that it’s the practices responsible for the

differences and not the poor lifestyles of patients and general global health of the population.”

A non-executive director re-affirmed the difficulty of performance managing clinicians under a nationally agreed contract:

“What this does demonstrate is how difficult it is for managers to performance manage when clinicians have the power and hierarchy because of the contract they have. Effectively it is very difficult to actually sanction a practice.”

One PCT director explained the importance of using the data to reduce variation and promote change:

“Yes, it is important but it should be to imply that there is variation...the way these charts are presented implies that there is something not right which when shared with clinicians can put them on the defensive foot. They then spend all the time justifying why there might be variations and not actually owning the problem whereas if you asked them what it could mean they are more likely to relax and talk about it and initiate a clinical dialogue. That is often the way to make change happen because clinicians work autonomously and don't really have the opportunity for anyone else to tell them they're right, wrong or indifferent”

A practice manager described the difficulty with patient demand and used this as an explanation for variation of performance across practices:

“Patients have too much choice, a higher expectation and feel it is their right to be referred even if the GP feels it is inappropriate. Getting the message to the patients is very difficult.”

iv. Perceived Importance

Perceived importance of the BCBV productivity indicators was analysed using a ranking system of one to five with one indicating unimportant and five as very important or essential. Most interviewees across the various disciplines ranked the importance of the clinical and prescribing BCBV indicators as 4 (ranging between 3 and 5).

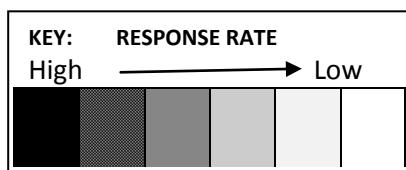
Although importance of the data was recognised, the majority of participants raised the importance of asking questions of the data and using it appropriately to explain the variance

and improve clinical practice. This was a recurrent theme raised in response to various questions. GPs in general did not rank the data as high as directors and managers.

A summary of weighted responses on the perceived importance of the BCBV productivity indicators across various disciplines is presented in figure 4.16.

Figure 4.16: Perceived importance of the BCBV productivity indicators

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
1 - Not important or not relevant					
2 - Not important					
3 - Quite important					
4 - Important					
5- Very important/essential					
Emphasis on <u>use</u> of data					



Some GPs made reference to importance of using the data appropriately rather than simply capturing it and being satisfied that *falling in the middle* was acceptable:

GP1 - *“It should be more relevant but in practical terms it’s more important to use the data than seek comfort from being in the middle. It would be ranked higher if it was made more meaningful and relevant. It needs careful analysis of the meaning of the data.”*

GP2 - *“If the practice was in the middle I probably wouldn’t even ask any questions.”*

GP3 - *“There are two sides to this; a financial side and an educational side. I think the financial side should fall out of the educational side rather than it being totally financially driven.”*

GP4 - *“The main issue is about the intervention rather than just capturing the data.”*

One Chief Executive explained why he ranked the BCBV productivity performance data as 5:

“Five – the reason it’s 5 is because you need to understand the shape of the health care system you are in and you can only really understand it comparatively. There aren’t absolute measures, there are only relative measures.”

A GP and a PCT director gave reasons why they felt the data was important. These involved: (a) forward planning and (b) understanding the broader picture at a population level. These are described as follows:

GP – *“Without this data you would have no idea of what your performance measures were or whether you were doing it right or not – it influences how we plan and what we do.”*

PCT Director - *“They’re a mechanism by which we can get clinicians to get some sort of population perspective and start to tackle it because clinicians tend to focus on their caseload and patients. What they don’t get is that a decision they make has an impact on someone else because there’s less money to go around or because they’re occupying a particular clinic space. Getting them to look at the global picture is very difficult.”*

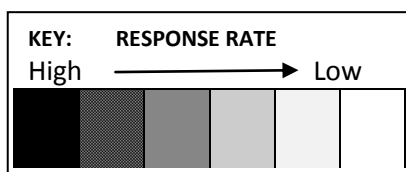
v. Presentation and subsequent use of data

The majority of participants across all disciplines believed that data presentation was an important factor on how and whether the data would be used. Colourful, visual, user-friendly pictorial graphs and charts were considered preferable to tables and printouts in understanding the information quickly and getting a message across. Data presented in a de-anonymised format enabling benchmarking and comparison with peers was considered beneficial. Although colourful graphs and charts were preferable, there was a desire from some participants for more detailed information to be available to support the charts which could enable a more comprehensive, clinical dialogue.

Various strategies emerged to improve use of performance data and achieve goal alignment. One strategy was to ensure data is adequately broken down. This would make it more meaningful at practice level where it could be used to have a dialogue and explore explanations. Another strategy involved development of action plans through dialogue between clinicians and managers to provide strategic direction and goal alignment. A summary of weighted responses on the presentation of data and subsequent use across various disciplines is presented in figure 4.17.

Figure 4.17: Presentation of data and subsequent use

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Accurate, meaningful data with supporting more detailed information					



Three PCT directors provided examples and explanations of why visual representation of data was better:

PCT director 1 – *“A good example is with prescribing data where people have responded well to graphical representation as opposed to tables or figures.”*

PCT director 2 – *“History shows that it does make a difference which is evident in prescribing data where we have got a change in behaviour when data is presented graphically and used with a comparator with one’s peers.”*

PCT director 3 - *“Yes I think visual representation of data in diagrams, bar charts, pie charts etc is very powerful because most people through IQ testing and other things that have happened, actually respond better to pictures than words.”*

Comments from three GPs provided an explanation as to why visual representation of data in a de-anonymised format was important to them:

GP1 - *“It would have more meaning if the data had names on to allow comparison. There is still a need to identify ‘single handers’ and specific practitioners rather than just practices. It is still possible that if you have one GP that is performing badly it gets covered up by the others in large group practices.”*

GP2 - *“It is good to see if there are co-relations in a given practice, for example: Between their referral rate, cost of prescribing, deprivation and so on - or not per GP. They’re all sorts of cross-relations that can be done that would provide all sorts of interesting data – then you would have to say, well is there a consistent pattern in that?”*

GP3 - *“Yes, I think you need to have the data in a visual form like this because purely giving me a list of numbers of what these are would not have helped me at all. I think it’s important to know if you’re an outlier or not and which practices are outliers but also for those who are outside what would be an acceptable variation. So it’s understanding what the normal range would be and presenting it in a visual way. So it’s saying to a practice, ‘this is unusual, have you got any special reason for this?’ Rather than just, ‘you’re in the middle – that’s great’.”*

One GP provided an example of where data is not user friendly due to presentation style as abbreviated activity data:

“Our monthly PBC returns for things like outpatients and emergencies are all abbreviated. If I only look at this once a month I have to sit there with a key which might be twenty terms long trying to work out that’s that and this is this . It’s just not user friendly and that happens a lot.”

Three more GPs expressed the importance of understanding and interpreting data before ‘jumping to conclusions’:

One GP referred to being questioned on his referral data for cardiovascular disease which turned out to be due to the provider over-charging (or incorrectly coding activity); issues totally outside of the control of the referring GP:

“It’s important to break the information down by condition and indicate the individual position in relation to other practices and national averages and ask for an explanation which could be quite legitimate.

The same GP provided an example which generated a change in behaviour:

“We were informed that we were a very high referral practice for cardio-vascular disease so we analysed 12 months cardiovascular referrals and the costs that secondary care was charging the practice. They were actually billing us for full outpatient costs for arranging echocardiograms and ECGs. So we stopped referring anybody for an ECG to secondary care and we explained that an echo was not a full cardiologist opinion requiring a full cost....”

“.....This sort of analysis begins to make you suspicious of all the data which is then counter-productive.”

Another GP expressed the need for a data management adviser attached to individual practices to help understand and interpret the data, similar to the prescribing advisers currently offering advice to GPs on prescribing matters:

“Figures are currently shared but there needs to be a data management adviser within the practice. It needs to be someone who understands the data and can make some recommendations for change or provide robust explanations for why certain areas are high/low etc – similar to a prescribing adviser who offers advice around prescribing. Clinicians don’t have time to do this and their time is too expensive.”

One PCT manager provided an example of how use of different terminology for the same data was considered acceptable or not:

“How the data is presented does make a difference, for example: The scorecard was presented in different ways. RAG rating was considered bad because all they could see was red. ‘Quartiles’ was rejected as people just looked for the lower quartile. Presented as standard deviations above or below PCT average was more widely accepted and seen as less threatening. 1 standard deviation above was considered an area of excellence whilst 1 standard deviation below PCT average was an area of potential development.”

In addition to the GP quoted earlier, reference to the use of prescribing data and subsequent success of prescribing advisers was also made by a SHA director:

“Prescribing advisers demonstrated success because it was recognised as a shared task and there was a trust built up. It got people believing that it was a problem which they could tackle together.”

One PCT director emphasised the importance of accurate and timely information:

“Information needs to be accurate and presented in a timely fashion. For example: referral patterns on the first week of each month...”

Another PCT director referred to the need for buy in and ownership at various levels within the organisation to improve performance:

“There needs to be buy in and ownership at various levels including the Board. There needs to be clarity about direction of travel, action plans and buy-in from staff. There also needs to

be buy-in from other organisations because a lot of targets won't be achieved in isolation, for example, the A&E targets. There needs to be an overall strategic plan with buy in from all stakeholders."

Another PCT director referred to shifting resources to help improve performance and reduce variation whilst at the same time highlighting the difficulty in achieving this with limited growth monies available to enable this to happen:

"Shifting resources according to need; there has to be a gradual levelling but this is difficult to achieve at a time when there is no additional growth money due to the current economic times. The only real way to achieve this is to look at those practices that manage efficiently and do without so you can bring some of the others up to their level."

4.7.6 Contract Inclusions and Goal Alignment

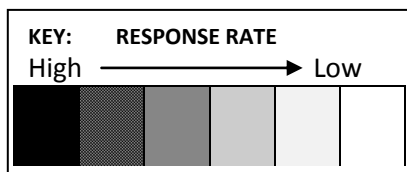
Although most interviewees believed that incentivising performance measures such as the BCBV indicators through the Quality and Outcomes Framework (QOF) would change behaviour, there was a view that such indicators should not become a mandatory contractual obligation. Some respondents believed that incorporating such measures into the QOF would lead to perverse behaviour and unintended consequences where practices could 'game the system' to their benefit and at the expense of patient care.

Reference was made by one GP to putting clinicians in a difficult position causing a potential conflict of interest as the patient's advocate. One PCT director and one GP felt that finance and contract management should be removed and instead focus should be placed on clinical care pathways. This corroborated a comment made by a chief executive who referred to 'alignment of values' as being important alongside alignment of objectives.

A summary of weighted responses across various disciplines is presented in figure 4.18. A more detailed analysis of the findings follows.

Figure 4.18: Alignment of goals by incorporating performance indicators into the GP contract

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Incentivising clinicians by incorporating performance indicators into QOF would change behaviour	Dark Grey	Dark Grey	Medium Grey	Medium Grey	Medium Grey
Risk of perverse behaviour and unintended consequences by incorporating into QOF	Medium Grey	Medium Grey	Medium Grey	Dark Grey	White
Focus should be aligning goals through incorporating measures in clinical care pathway – value alignment	Medium Grey	Dark Grey	White	Light Grey	White



One PCT director felt that it was time for QOF to be refreshed and the BCBV indicators included:

“Yes – we probably need a refresh of QOF – dropping some indicators and bringing in the BCBV ones. QOF is something practices are signed up to so it would be better to incorporate them into the current framework rather than trying to set up something completely new to get them engaged”

A Chief Executive stressed the need for alignment of values to achieve the desired outcomes: *“The contract is only the formality, it’s the values alignment you need. You don’t have to worry too much about what it says in the contract. If everybody is agreed that they want to do it, you almost never go back to the contract. You need it in the contract when somebody doesn’t want to do it actually”*

Problems and difficulties associated with including additional indicators within QOF were highlighted by various respondents:

PCT Director 1 – *“We’re limited by QOF and the contract. There is a need to look at the bigger picture. The problem is contracting conversations begin around the money rather than the care pathway/outcomes. Quality and care pathways should come first and the money and contracting should follow rather than the other way round.”*

GP1 - *“You couldn’t include in QOF in the sense that secondary care is still generating its own referrals. It’s not very fair to place that burden on practices. Under primary care commissioning it may be through financial expediency that they have to do it rather than through performance management requirements.”*

PCT Director 2 – *“There are too many things in QOF already which will result in too much performance monitoring. There is a problem with wanting and demanding patients which could increase the tension within practice if included in QOF.”*

GP2 - *“If it is made part of QOF it has to be worthwhile doing but not so large that you would do something perverse in order to achieve it. It is not always worth chasing if your population dictates that it is not achievable. For example: Patient perception and appointments within a particular timescale does not work in our patient population.”*

Some respondents expressed concerns over the potential consequences if such measures were incorporated into either the QOF or a separate part of the contract. One GP referred to a tick-box exercise for the practice to earn money and the need to focus on clinical care pathways rather than performance management of such measures being used as a *‘policing tool’*.

“Negative effects include focussing on one area at the expense of other important areas and also not a very motivational tool as it often feels like a ‘tick box’ exercise to earn money for the practice rather than for the good of patients. You’d hope that clinicians wouldn’t be driven by the targets such as leading to a pressure of whether to refer or not depending on the current level. As long as clinicians work to appropriate evidence based care pathways then it should be considered appropriate. It must be considered based on a clinical care pathway rather than simply a policing system.”

Another GP pointed out the difficulties of having to meet even more targets if included within QOF and how this may have negative consequences for both the clinician and the patient:

“Most GPs are already working to capacity already. Although attracting more money to more performance indicators may be nice regarding additional income, the additional pressure to achieve these could cause a great deal of stress which isn’t good for the clinician or the patients. There has to be a balance. Adding more things to QOF could just make the job even harder and more stressful than it is already.”

One PCT director highlighted the difficulties with performance indicators and the fact that there will always be unintended consequences that result from implementing such measures:

“There will always be unintended consequences from performance indicators. You can’t isolate only the things you want and exclude those you don’t want because things are inter-dependent. The best you can do is develop a range of proxy measures to try and encourage the things you want. There’s no such thing as a perfect KPI.”

A SHA director expressed concerns over potential perverse behaviour that may result from incorporating these performance indicators into the mandatory element of the contract or the QOF. The same SHA director made reference to how things may need to change in the future as GPs take on more commissioning responsibilities:

“There would be concerns over how the measures could be incorporated safely due to potential associated perverse behaviour. For example, if average referrals over the year is

looking high, patients may suffer if not referred appropriately simply because of the need to hit a target and receive an incentive. I think the contract that will emerge between GP consortia and their individual practices will get into this sort of territory. It looks like there may be a separate part of the GP financial contract that will cover commissioning and that to earn that you will have to comply with certain rules that your consortia lays down, now that's going to have some sort of performance measures in order to support it."

A GP made reference to potential perverse behaviour if such measures became incentivised through QOF:

"To incentivise 'to avoid certain things' could be the start of patients being rationed by the back door."

This perspective was echoed by another PCT director:

"This will lead to 'gaming' in the system. 'How can I get my maximum points? Or how can I fulfil my contractual obligations?'"

A PCT commissioning manager highlighted the lack of alignment of objectives between GP practices and the commissioning organisation and provided an explanation for this as a lack of understanding of how each indicator impacts on outcomes:

"It comes down to understanding how each indicator affects outcomes. Practices will have their own vision and objectives which often do not align with those of the PCT because they don't serve their purposes or achieve what they want to achieve as an organisation. We need to improve on understanding and aligning objectives across organisations such as the PCT and practices."

The same commissioning manager referred to the problem that the QOF is not mandatory and practices can either "opt in" or "opt out" with respect to implementing the various elements of the framework. As there are no 'real' sanctions associated with achieving targets set out in QOF, this can ultimately affect performance and patient care:

“There are no penalties for not complying with the targets in QOF and practices can always justify their behaviour by saying they’re not aspiring to a particular target and because QOF is the voluntary bit of the contract - practices can always ‘opt out’. Most of the contract is based on reward with no real sanction. There needs to be a link with QOF back into the contract with appropriate sanctions. For example: One of the QOF indicators refers to calibration and maintenance of equipment but is worth only a small number of points so practices could indicate that they’re not aspiring to this indicator because QOF is optional. However, all practices should have good clinical governance systems in place as part of the contract so a link with this QOF indicator should be made with the clinical governance requirement of the contract and appropriate sanction imposed if not complied with.”

4.7.7 Incentives and Goal Alignment

Most participants across the range of disciplines believed that financial incentives were the main driver for motivating GPs to change their behaviour. However, a number of participants made reference to the fact that: *‘money is not always the thing that motivates people.’* Other things that can encourage motivation of clinicians include: goal attainment, altruism and personal development.

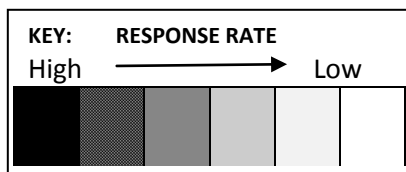
The term *‘clinical engagement’* was broadly used across all disciplines and considered essential to delivery of goals and objectives by most participants.

A recurring theme was reference to essential features of what constitutes a robust incentive scheme. These included (a) Assurance that there was a clear understanding of the intended objectives by all parties (b) Measures used to monitor performance were simple, measureable, achievable, realistic and able to be delivered within an appropriate timescale (SMART).

A summary of weighted responses on alignment of goals through use of incentives across the range disciplines is presented in figure 4.19.

Figure 4.19: Alignment of goals through use of incentives

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Financial incentives motivate GPs to change behaviour	Dark Grey	Medium Grey	Medium Grey	Dark Grey	White
Money is not the only driver or incentive to change behaviour	Medium Grey	White	Black	Medium Grey	White
'Clinical engagement' is essential to achieving desired objectives	Medium Grey	Dark Grey	Medium Grey	Dark Grey	Black
Incentives need to be SMART	Medium Grey	Black	Medium Grey	Dark Grey	Black



One PCT director felt strongly that an incentive scheme should not be linked to core funding but should form part of an overall systems management approach to improving performance:

“An incentive scheme shouldn’t be linked to core funding but might be linked with other kinds of support and funding eg. Self- motivated practices will often easily achieve so get the money through demonstrating quality and attainment whereas those at the bottom who are struggling will need systematic support with not much choice on how to spend the money because they have got poor systems in place.”

Another PCT director felt there should be some form of incentive attached to desired objectives. This should not only be financial in nature but should be worthwhile with respect to of the amount of work required by the practice in delivering the desired objectives.

“The incentive, if it’s financial has got to be worth doing because if practices are going to go for some target there is in itself inherently a cost to that for the practice. Either you are going to do more of something or you have to drop something to do that, so there has to be an appropriate incentive that’s negotiated between the PCT and the practice. So you have got to want to do it. It’s got to be at the right level to achieve and it’s got to be with the right level of agreed incentive between the organisation and the individual practice.”

One GP argued defensively that it wasn’t only money which incentivised people and provided examples of how incentivising through the QOF could be replaced with a salaried model where performance management forms part of that role:

“Not just money motivates people. There is a lack of understanding of the GP contract and there is always a tension and perception that GPs get rewarded through QOF for example by other members of the healthcare team such as practice nurses or treatment room nurses undertaking the work. There is a tension between GPs and managers of the PCT. There are two options: a) Carry on with the current model and add in extra for performance management or b) Replace the current system with a salaried model building in performance management and personal development as part of the professional responsibilities.”

Two SHA directors referred to alternative incentives other than financial. One commented:

SHA Director - *“Incentives don’t just mean money. Certificates, accolades, letters etc can all be incentives.”*

A Chief Executive echoed this view emphasising the need to ensure performance measures are worthwhile and associated with meaningful reward and ensuring incentives are clearly understood within the context to which they are targeted:

“Different people are motivated by different things. For example: Financial incentives; goal attainment; altruism; ‘being super-duper’; research and personal development; more pounds in their back pocket. There needs to be a greater sophistication about gauging who you are talking to but most importantly the measures must be appropriate and worthwhile and associated with a meaningful reward....”

“You need to debate and understand the context. For example: “It may be that structural issues are preventing a practice progressing and I wouldn’t have a problem incentivising the practice. Alternatively the practice could be down-right lazy and taking every penny possible. This is where the practice should be dealt with through sanctions.”

The same Chief executive provided an example of how bringing in financial incentives to an organisation changed the original spirit of what was trying to be achieved:

“I’ll never forget the first big year of waiting list initiatives, where I was involved. All of the surgeons and anaesthetists did it all for a personal bursary to spend on development. I can’t remember exactly, they might have got a thousand pounds or something to spend on going on a course, on doing something they wanted to do. They did loads of extra lists and they extended lists and everything, and they all just did it to gain the chance to do something they found interesting. By about year three you were debating at five hundred quid a list per patient. The introduction of money into the debate by the government throwing sums of money into the pot changed it for the worse.”

A SHA director took a similar view with regard to understanding the key drivers for practices and individuals within those practices and becoming more sophisticated in how the system is managed:

“Understanding the key drivers for practices as groups and individuals within that is essential. It’s not as simple as chucking money at it. Money is one driver, being able to demonstrate high quality is another and being able to show that you’re above average is another. Making doing the right thing easy and the wrong thing hard are others. So if you don’t look at all those different things and say ‘well, look we’ve built something that is actually meaningful to the contractor and makes the contractor think, yes, I understand why I need to measure that and why I’m going to get rewarded’. Often it gets down to a simple:

'you get the money if you do it and you won't if you don't.' We need to get more sophisticated.'

A PCT commissioning manager felt strongly that awarding money to practices would not necessarily drive up performance:

"Throwing money at poorly performing practices is not the answer to improve performance. Targets need to be practice specific recognising that practices are different."

Another PCT director commented on the complexity of the current system with respect to local and directed enhanced services and the various and differing rewards attached to the different schemes:

"Current incentive schemes are problematic in that there are too many. For example: The current LES's and DES's. It's too complicated and may have local variation regarding standards and payments and they often take an inordinate time to organise. They should all be rolled into a single scheme instead of having lots of bits and pieces."

There was a mixed response as to whether incentive schemes should be rewarded based on achievement of targets or percentage improvement. The majority of respondents believed that incentives should be rewarded based on a combination of achievement of targets and percentage improvement.

i. Targets or improvement

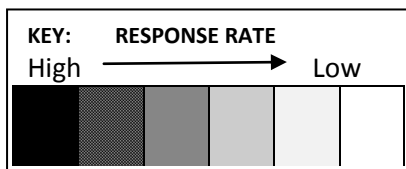
Most GPs felt that it would be unfair on the poorer performing practices to reward performance based on targets as there would be little chance of reaching what might be considered to them as an unrealistic target. This supports the comments made with respect to ensuring incentives are based on SMART objectives.

In contrast, some GPs felt it was unfair to reward performance based on improvement for those practices that had already worked hard and achieved a high level of performance. This could lead to *'de-motivation of the good performers by bribing the poor performers'*.

A summary of weighted responses on alignment of goals through use of incentives according to targets or improvement across the various disciplines is presented in figure 4.20.

Figure 4.20: Use of incentives according to targets or improvement

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Incentives should be awarded based on improvement.	Dark Grey	Dark Grey	Dark Grey	Dark Grey	Black
Improvement should be driven through peer review	Light Grey	Light Grey	Dark Grey	Light Grey	White



Some respondents across various disciplines felt that incentives ought to be rewarded based on a combination of achievement of targets and percentage improvements. One PCT director commented:

“There needs to be a combination of the two with some recognition of where you started from then showing signs of improvement.”

A GP made a similar comment:

“Providing that it can be demonstrated that effort has been put in then rewards should be based on both improvements and targets or outcomes.”

A PCT commissioning manager referred to a similar model encouraging both good and poor performers to improve:

“Yes, there should be a combination on an incremental sliding scale to incentivise and encourage both poor and good performers to improve. It’s often much harder to achieve the highest level of target than the lower ones. For example: Imms and vacs targets in QOF.”

One PCT director emphasised the need for incentives to be achievable and based on improvement:

“Incentives should be based on improvement. Increasing a target year on year will continue to get ‘buy in’. However if the bar is set too high to begin with, you’re unlikely to get the necessary ownership.”

A GP explained why rewarding incentives based on improvement was better and provided an example using the national health check five year screening programme in the 40 to 74 year olds:

“Percentage improvements are better because they can be assessed over a longer period of time. An example is the national health check which is a five year programme which offers screening of all 40-74 year olds. Many practices took a year to get that off the ground. If we were being measured at the end of year one, we wouldn’t have achieved that target and we were going to be slated for it. It would have probably dis-incentivised us for the remainder of the four years and we might not have bothered doing it. But actually it’s being done and we’ll show you where you are at the end of year one, but you’re not going to be beaten up about it because you’ve got another four years to do it .”

One GP explained why using a combination of target achievement and percentage improvement should form part of an incentive programme and why rate of progress is more relevant. Reference was made to being incentivised through the national contract for doing things which were already being achieved as part of core services:

“It is very difficult to achieve the last few percentages if practices are already very high achievers. They’re never going to reach 100%. It is equally unfair to get someone at the bottom to get to the top. Rate of progress is probably more relevant. I think reflecting current achievement as well is important. One of the things I felt with QOF is that it gave me rewards which I had not previously had for doing what I was already doing. I may have had to change the format of what I was doing and I may have had to demonstrate it better but in terms of clinical activity but I was already doing it!”

The point outlined above on whether incentives ought to be linked to what should be considered *core business* and whether financial incentives are an appropriate mechanism to improve performance was referred to by a PCT director, non-executive director and SHA director respectively:

PCT director - *“The problem with incentive payments is that it often means additional payments to people for what they ought to be doing anyway. I don’t feel money is the right way to incentivise as it distorts things. We should be using patient satisfaction and actual outcomes like mortality data.”*

PCT Non-executive director - *“I don’t like crude incentives or bonuses when everyone else doesn’t get them in the NHS.”*

SHA director - *“You must always think what you are hoping to achieve and at what point does delivering a target become routine, that is, part of what you are doing and no longer requires any sort of reward attached to it. There’s something about ‘retiring’ certain targets after a couple of years and replacing them with something else. You’d still need some sort of global target that says you must maintain certain levels and standards of course.”*

Another PCT director provided examples of where performance targets had led to perverse behaviour particularly when practices had little chance of improving sufficiently to reach the desired target:

“Targets have led to practices becoming ‘creative’ and perverse behaviour. The first thing they do is to find a way of getting round the problem. They don’t find a way of dealing with it particularly if they have no chance of achieving the target. An example is through exception

reporting where the practice fixes the system so they can reach the target. Single targets can also lead to distortion of care, such as not referring when they ought to be.”

One GP took the view that practices should not be rewarded based on improvement particularly if they were still considered ‘*sub-standard*’ or below the PCT average:

“It’s not appropriate to award incentives on improvement because they may still be sub-standard so they should at least reach the PCT average before they are rewarded.”

ii. Reputational programmes

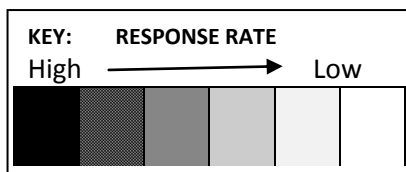
There was a mixed view over whether performance data ought to be placed in the public domain and whether this would act as an incentive to change behaviour and subsequently improve overall performance.

A minority of GPs felt that publishing primary care performance data might alter practise. However there was concern over misinterpretation and misuse of the data if it wasn’t adequately explained and presented in a format that could be easily understood by the general public. In contrast, most managers and directors believed it was important that the public ought to be informed of primary care performance being a service funded through a tax-funded system. While most managers believed public release of data was important, at the same time it was recognised that the data must be accurate with adequate explanations of its meaning, validated through other sources and used sensitively.

Concerns were expressed particularly by GPs over a lack of understanding of such data by the general public due to the complexity of the information. A summary of weighted responses on alignment of goals through use of reputational programmes such as public release of performance data across various disciplines is presented in figure 4.21.

Figure 4.21: Reputational incentives - Public release of performance data

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Primary care performance data should be published as it is a service funded through use of public money	Dark Grey	Dark Grey	Dark Grey	Light Grey	Dark Grey
Concerns over mis-interpretation and misuse of data if published	Light Grey	Light Grey	Dark Grey	Dark Grey	Light Grey
Data must be accurate, timely, validated with other sources and adequately explained	Light Grey	Light Grey	Dark Grey	Dark Grey	Light Grey



Two GPs felt that publishing primary care performance data would not change performance for a variety of reasons. Examples of where performance had not altered performance over time were provided and issues felt important to patients were highlighted:

GPI – “I doubt very much whether it would change performance. We have had ten to fifteen years of that where practices that were poorly performing ten to fifteen years ago who are still poorly performing and have been supported in their ‘poorly performingness!’”

GP2 – *“Most patients are not really interested in performance data. They simply want convenience, transport, family being nearby and those sorts of issues. If you are working in an area of quite severe disease, and you are doing your best, and people are being critical of you because your post-op mortality rate is a little higher than elsewhere, I would have thought with all the correction in the world, it may well be due to the patients you are taking on. It’s really only going to appeal to special interest groups and the media as a bit of a stick and to probe.”*

Conversely, another GP commented that publishing such performance data may result in patients choosing to register with other practices:

“It may result in people fighting with their feet. For example: If a practice has high emergency admissions people may move to another practice which doesn’t?”

One PCT commissioning manager explained the need to allow patients to compare practice performance. Most patients who had only ever been registered with one practice and received a particular standard of care may consider this to be normal, adequate or even good when in actual fact it may be significantly sub-standard:

“Yes showing the data and justifying standards through comparison is the only way to improve standards really. For example: We currently have a situation whereby a practice performing poorly achieves a high patient satisfaction as patients have nothing to compare to. They don’t know what they could have elsewhere unless they know what is out there which may encourage them to move. Patients don’t have that understanding of their neighbouring practice in terms of quality of services or outcomes.”

The greatest concerns expressed over publishing primary care performance data was the potential misinterpretation and misuse of information without adequate explanation. Two GPs expressed concerns with this:

GPI - *“It could create more stress inducement. Whilst it may ‘keep you on your toes,’ there are often good reasons for the data. For example: Emergency admissions. You would want to be careful that what is published is clearly explained as there is a danger the public could misinterpret the data.”*

GP2 – *“It could be a negative thing because different practices often in the same area have different populations, different morbidities and different demands so comparisons might not be fair in respect of populations and demographics.”*

A non-executive director also commented:

“Information can be used and misused depending on who is reading and releasing it.”

Another concern expressed by two GPs and one PCT director was the risk of widening health inequalities. Comparison with school league tables was used. One GP explained:

GP1 - *“It could possibly widen health inequalities similar to what’s happened in schools and education where inequalities exist because of competition for places in favoured schools and school league table’s influence where parents choose to send their kids to school.”*

Despite the reservations outlined above, a number of respondents felt that releasing primary care performance data into the public domain was a good idea providing assurance could be guaranteed that it was undertaken sensibly, sensitively and with adequate explanation to avoid misinterpretation. One GP commented:

GP2 - *“If released into the public domain, it has to be robust, reliable data which is reproducible and compares ‘like-with-like’ for PCTs and practices and done in a sensible way to avoid misinterpretation of the data. Not like an FOI request which are delegated without understanding the issues underneath. It should be shared with the public as it is public money which is being spent.”*

A PCT director took a similar view expressing the importance of adequately explaining the data if released into the public domain:

“Yes, providing data is accurate, meaningful and reflects good outcomes. Also that it is contextualised prior to release into the public domain. For example, if taken straight into a league table those who have made significant improvements but remain outliers will still get branded as poor; there is a danger of misinterpretation. It could be quite damning if you

published information without adequate explanations and clear rationale and reasoning behind why they are there; it would just lead to disengagement with practices.”

A SHA director adopted a similar perspective stressing the need to have accurate information with statistical relevance and provided an example of where this has failed in the past:

“Yes I’m comfortable with publishing the data. The problem is how well it is explained and how meaningful it is. For example, some websites are available where patients can post comments and rate the practice but the numbers are very small and tend to come from extreme views from ‘fantastic’ to ‘awful’ experience, so the figures are not reflective of outcomes or quality. You could have a five star practice based on three people’s comments! The public are bright and the folk that think you should hold back from publishing things because of a lack of understanding are wrong. The problem is that of accuracy of what is being published and the statistical relevance of it...”

4.7.8 Future commissioning arrangements

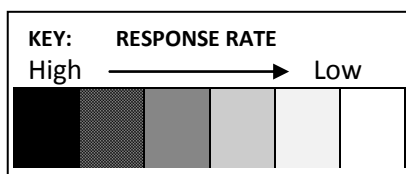
The following section provides a perspective from participants of the future commissioning arrangements through clinical commissioning groups led by groups of clinicians. Although this topic did not form part of the interview schedule, future NHS reforms was a recurrent theme that emerged in response to various questions across all disciplines. This can be explained by information being published at the time by the Department of Health outlining the new NHS reforms.

There were mixed views with respect to devolvement of PCT budgets to clinical commissioning groups and subsequent performance monitoring. Concerns were expressed over the costs associated with managing this responsibility in the current financial climate with no growth monies available for developments; potential difficulties with peer review; additional accountability and responsibility attached to managing an £80 billion budget; and the need to incorporate a contractual element relating to commissioning into the GP contract.

A summary of weighted responses on future commissioning arrangements and performance management across various disciplines is presented in figure 4.22.

Figure 4.22: Future commissioning arrangements and performance management

	PRINCIPAL			AGENT	
	PCT Directors	PCT Middle Managers	SHA Directors	GP	Practice Manager
Yes - the new commissioning arrangements will encourage clinicians to scrutinise and take ownership of performance data	Dark Grey	Dark Grey	Dark Grey	Light Grey	Black
Improvement will occur through peer review	Light Grey	Medium Grey	Dark Grey	Light Grey	White
The current financial situation will be a challenge for commissioners going forward	Medium Grey	Medium Grey	Light Grey	Medium Grey	Medium Grey



One GP explained that GP commissioning would be an expensive approach. Another GP expressed concern over taking on this responsibility in a climate of financial difficulty with no growth monies for service developments:

GPI - “GP commissioning is not going to be a cheap option because it will need to be built into the day job. It’s not a lunchtime or evening activity so it will be about who’s covering and how do you do that and that’s going to be costly.”

GP2 - *“I don’t think we know which way commissioning is going at GP level yet. If the financial climate wasn’t as it is now then I would say yes. If we were able to run it as we used to run Primary Care Groups we would be able to look at clinical disease areas, take the data into account and look at how we support best practice. Whether this is going to be a financial option over the next few years is an unknown.”*

One PCT director expressed a view that GPs would have to consider performance data under the future commissioning arrangements or run the risk of losing credibility and ability to make savings for re-investment:

“Absolutely, and if they don’t they run a major risk of running out of money, losing credibility and losing the ability to make savings which they can then re-invest in patient services in their area.”

Although a number of respondents considered peer review as a positive approach there was a concern that confronting peers over their behaviour and practice could pose some difficulties.

Two PCT directors felt that peer review would provide an opportunity to ask questions and challenge behaviour in a non-confrontational way:

PCT Director 1 - *“It will allow GPs to have a conversation about referrals or the like and to question performance of colleagues in a non-confrontational manner.”*

PCT Director 2 - *“It will encourage peers to ask questions over variance between practices.”*

One GP felt that peer pressure and peer support would help reduce the variance between practices:

“Peer pressure in one sense and peer support and guidance on the other hand will ultimately drag those outliers more close to the mean. That’s the driver for success or failure of what GP commissioning is about. It’s taking responsibility for your peer group.”

Another PCT director made reference to peer review and the fact that under the new commissioning arrangements it will become a mandatory exercise:

“Until a few months ago GPs were vehement that they would never scrutinise anyone else’s work but they’ve got no choice now.”

One SHA director outlined the complexity of the system and the difficulty of practices coming together as cohesive, accountable bodies especially for those clinicians who have historically worked in isolation for many years:

“It’s quite a complex process and if you go where there are a lot of single-handed practitioners you may invent a thousand reasons why they are all single-handed but it means that they are not cohesive. Getting those people to understand that they are actually part of a system, they are not autonomous and unaccountable, and we do require them to benchmark themselves, be benchmarked and not to be judged.”

Another SHA director highlighted the difficulties which clinical commissioning groups would be likely to encounter through challenging the behaviour of peers:

“I think it will but it won’t be easy. Until now PBC has been shy of confrontation over behaviours. The belief is that they’re there to advise on commissioning not actually change the way individual practices provide services and therefore have an impact on how they commission services.”

4.8 Conclusion

Performance management is an important mechanism to improve outcomes. This requires adequate engagement and ownership from all relevant parties and is likely to be more successful if undertaken in a developmental, facilitative way with use of appropriate incentives to encourage motivation.

Soft intelligence and information such as training, teamwork and communication are just as important as harder, tangible performance measures in improving performance and goal

alignment. Measuring performance through compliance with evidence-based care pathways that relate directly to patient outcomes is one mechanism for achieving this.

Significant variation in performance exists across commissioning organisations and individual general practices on the Better Care Better Value performance indicators. The Practice Development Framework (PDF) provided general practices in East Lancashire with a platform to improve quality through provision of reliable information and enabled practices to identify needs for improvement.

Findings from the informal, exploratory interviews acknowledged the importance of performance management to improve outcomes. Adequate stakeholder engagement and ownership is an essential feature to achieving successful performance management. Accurate, reliable, evidence-based, consistent and timely performance data; presented in a format that can be easily interpreted and understood are other important features associated with performance management and goal alignment.

In primary care, the QOF is a key component in achieving goal alignment through use of financial incentives. However it appears that some measures within the QOF do not reflect quality or improve patient outcomes.

The principal-agent theoretical framework is used to understand the relationship between managers representing the principals and clinicians representing the agents. Chapter 5 will explain how principal-agent theory can be used to explain findings from the empirical research and those of the literature review, using the two most recognised theoretical assumptions: *information asymmetry* and *goal alignment*. These will be organised according to three main themes: (a) Understanding performance management (b) Use of performance management systems and (c) Barriers to performance management in primary care.

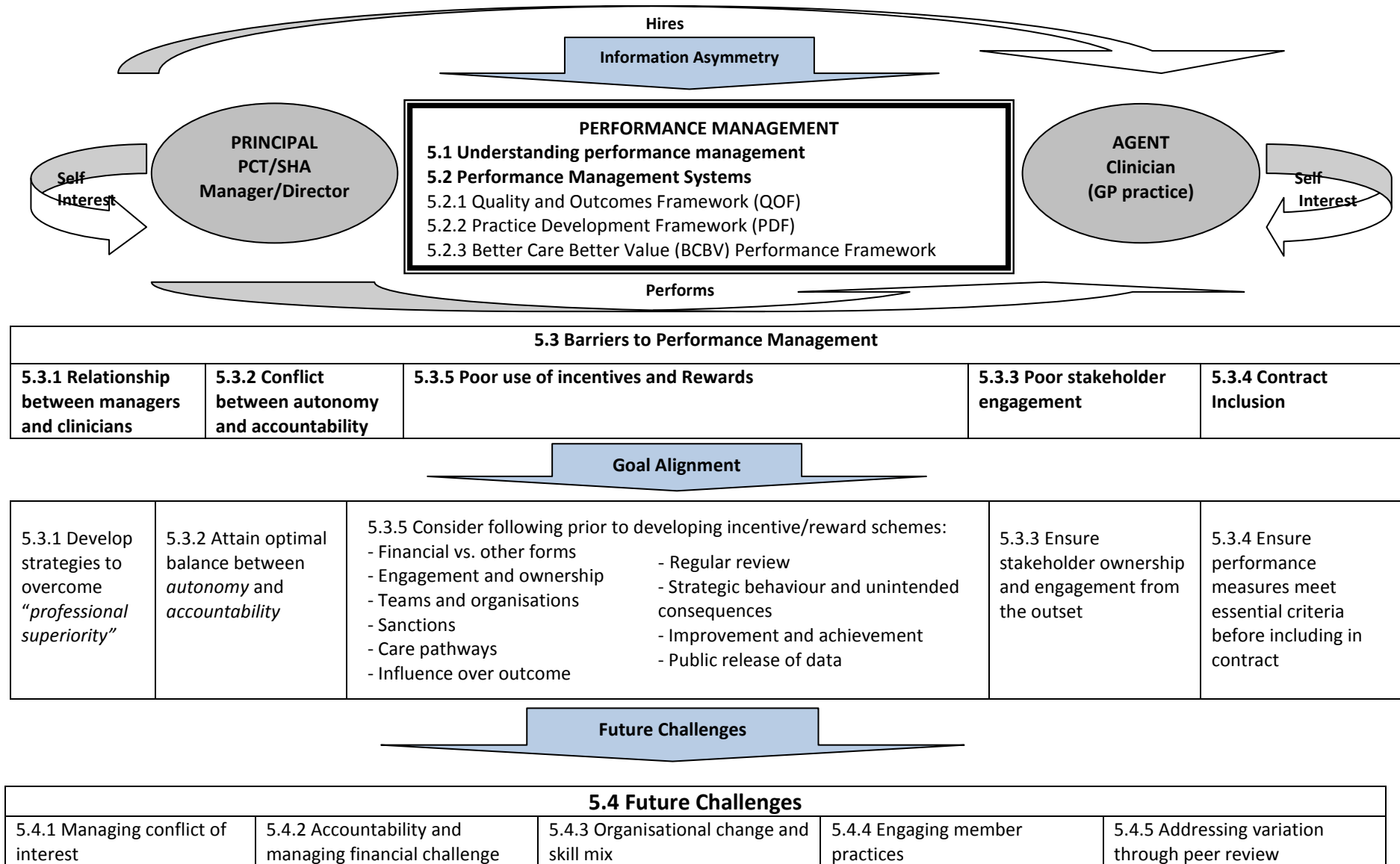
Chapter 5

Discussion

5.0 Introduction

A framework outlining the structure of the discussion chapter is provided in figure 5.0. This is intended to help the reader understand how the different sections fit together in context of the empirical findings, academic literature and underlying assumptions of the principal-agent theoretical framework.

Figure 5.0: Organisational map of the discussion in the context of Principal-agent Theory



The remaining part of the chapter discusses and explains the empirical findings and academic literature using the underlying assumptions of the principal-agent theoretical framework outlined in figure 5.0. Quotes highlighted in chapter 4 on the *findings* in response to a variety of questions and recurrent themes are repeated in the *discussion* where they help explain the point being made.

i. Understanding Performance Management

Section 5.1 links the findings from the academic literature to those of the empirical research on understanding the term *performance management* and what this means to different professionals.

ii. Use of Performance Management Systems

Section 5.2 explores the use of performance management systems in primary care. Reference is made to three performance frameworks that emerged from the empirical findings: *The Quality and Outcomes Framework (QOF)* - an incentivised framework of performance indicators that forms part of the GP contract.

A practice development framework (PDF) - a locally developed framework intended to improve quality and outcomes across primary care and

The Better Care Better Value (BCBV) productivity performance framework – a nationally developed performance framework that focuses on improving productivity across a range of indicators in primary care. These include performance indicators on prescribing and referral activity.

iii. Barriers to Performance Management

Section 5.3 explores the potential barriers to performance management in primary care. The empirical findings associated with the relationship between managers and clinicians in primary care are related to the academic literature in the context of the theoretical assumption of *information asymmetry*. The term described in the empirical findings as “*professional superiority*” is explored and discussed in relation to the academic literature and principal-agent theoretical framework. *Autonomy* and *accountability* are discussed in relation to the theoretical assumption of *goal alignment* in section 5.3.2. The empirical findings on stakeholder engagement are discussed alongside the relevant academic literature in the context of principal-agent theory. An important feature of principal-agent theory is the use of incentives and

rewards to achieve goal alignment. This formed a significant part of the empirical findings and academic literature and resulted in a number of emerging themes that are explored in the discussion. The themes that emerged on incentives and rewards relate to:

- Financial incentives;
- Engagement and ownership;
- Goal alignment across teams;
- Use of sanctions;
- Influence over outcomes;
- Performance across care pathways;
- Regular review;
- Strategic behaviour and unintended consequences;
- Targets and improvement; and
- Public release of data.

Although future commissioning arrangements and the respective challenges associated with them did not form part of the planned interview schedule, the timing of the formal interviews coincided with significant NHS reforms. Organisational change at this time resulted in most interviewees making reference to the changes and challenges ahead. These challenges are discussed in relation to the academic literature on former commissioning models and themed according to five key areas:

- Managing the conflict of interest
- Accountability and managing the financial challenge
- Organisational change and skill mix
- Engaging member practices
- Tackling variation using peer review

5.1 Understanding Performance Management

This section outlines what performance management means to different individuals and how the concepts of performance management and performance measurement are used interchangeably in the NHS.

It was recognised across all participants that performance management was important. However there were varying perspectives on how this should be undertaken and problems associated with current systems in primary care. This was described by one Chief Executive:

CEO - "Prior to NHS performance targets, clinicians were non-corporate, patients were confused and the 'value for money' concept was varied and poorly understood."

This can be explained using principal-agent theory under the theoretical assumption of *goal alignment*. If managers as principals and clinicians as agents do not fully understand the organisations objectives or targets whether through lack of understanding, lack of interest or lack of capacity then goal alignment is unlikely to be achieved.

Directors and managers make reference to achieving objectives and improving quality which supports the definition of both Lebas (1995) and the Office of Government Commerce (OGC 2010). Clinicians believe the term reflects the function of benchmarking and comparison with peers. This difference may be because of the various roles across different disciplines. Senior managers and directors are involved with performance management and achieving outcomes at a population level whereas clinicians tend to use indicators to improve performance at an individual level.

Softer performance intelligence such as training, staff turnover, attitudes, communication and value alignment are equally as important in successful performance management as hard, quantitative data often reported as rankings and score cards. Multidisciplinary team work was a recurring theme from the empirical findings considered important for successful performance management, an important aspect highlighted by Armstrong and Baron (2004). Financial accountability is highlighted in the literature as an important reason for undertaking performance management (NAO 1999; Hoefler 2000). Although this was not raised during the discussion on *understanding performance management* the issue was raised in the later stages

of the interview process, in the discussion on the productivity performance indicators and public release of performance data. These are discussed in sections 5.3.3 and 5.4.5 respectively.

Perceived differences by interviewees in understanding performance management demonstrate the confusion that exists when using the terms: *performance measurement* and *performance management*. Performance measurement was described by a range of participants as a quantitative data collection exercise for benchmarking purposes, having no meaning in isolation, compared with performance management which was considered a qualitative approach or “*measurement with a purpose*”. Thus although there was an understanding of the differences, responses from various participants indicate that the terms are used interchangeably.

Although there was a view that metrics and measurement should come before monitoring and management, most managers believe in the NHS there is greater focus on performance measurement than performance management. An explanation given by one PCT and one SHA director was that it is far more challenging to performance manage than it is to measure something. It is for this reason the NHS in general tends to focus on things that are easy to measure rather than on managing what is important. This concept supports the model developed by Lebas (1995) which provides an explanation of the differences between performance management and performance measurement. The two concepts are closely intertwined where measurement and management follow one another in an iterative process where performance management precedes and follows performance measurement in a virtuous spiral and performance management creates the context for measurement. The relationship between performance management and performance measurement is summarised by Lebas (1995) in chapter 2 figure 4 of *the literature review*.

The suggestion that there is greater focus on performance measurement than performance management within the NHS suggests that measures for detecting deviations, describing status potential and tracking past achievements are delivered. However, the preoccupations that apply to successful performance management systems such as training, team work, employee involvement, communication, attitudes, shared vision and incentive and rewards are not delivered to the same standards. This weakness within the system is likely to prevent

the organisation from achieving its desired goals. This supports the findings by Lebas (1995) who concludes that a powerful performance management system is one that supports measures that: give autonomy to individuals within their span of control; reflect cause and effect relationships; empower and involve individuals; create a basis for discussion and supports continuous improvement and the decision making process. In the context of the principal-agent theoretical framework, these weaknesses of performance management in the NHS will result in the commissioner (principal) setting goals which are unlikely to be achieved. The provider (agent) has either, not been involved in agreeing the goals, not received adequate communication or not received adequate training or resources to deliver the goals to the desired standard.

5.2 Use of Performance Management Systems in Primary Care

Other than the Better Care Better Value (BCBV) performance indicators used as an example for discussion purposes during the formal interviews, reference was made only to two other performance frameworks in the empirical findings. The first was the Quality and Outcomes Framework (QOF), a pay-for-performance framework which forms part of the national contract for provision of general medical services. The second was a primary care performance system developed locally known as the Practice Development Framework (PDF). The following section will explore how characteristics associated with these performance management systems: the QOF, PDF and BCBV productivity framework are linked with features of performance management systems described in the academic literature. An explanation why the QOF is so important to primary care clinicians is explored in section 5.5 of the discussion chapter where incentives and rewards are discussed in relation to achieving goal alignment.

5.2.1 The Quality and Outcomes Framework (QOF)

A description of the Quality and Outcomes Framework (QOF) and how it is negotiated is explained in section 4.1.

The fact that all GPs and practice managers made reference to the QOF compared with no managers or directors suggests the QOF was a priority for practices but not for the PCT or SHA. This could be explained by the financial incentives attached to achieving targets set out in the QOF which can result in practices receiving significant income. The framework supports features of performance management systems outlined in the literature. It provides an overview of practice performance through inclusion of multi-dimensional measures (Kennerley and Neely 2002); uses realistic measures that reflect day-to-day business (Greiling 2006; Flynn 1986) and are markers of outcomes or processes under the influence of clinicians (McKenzie and Shilling 1998).

The fact that managers or directors did not refer to the QOF suggests that the framework was not priority for them. This can be explained using principle-agent theory where goal alignment may not be achieved as the principal (managers/PCT/SHA) has different priorities to the agent (clinician/practice). This might be because QOF forms part of a national contract and primary care commissioning managers have limited ability to influence performance and outcomes delivered by practices. A question emerging from this debate is whether there is a need or any point in monitoring primary care performance according to the QOF if the financial incentive attached to the framework is such that the desired outcomes are delivered irrespective of local performance management techniques.

The empirical findings highlight a number of indicators within the QOF considered mainly by clinicians and some managers to be poor indicators of quality. Examples include, depression scoring and the patient experience questionnaire. Despite a lack of support for a minority of indicators within the QOF and some criticism of them not relating to patient outcomes, the framework was generally regarded by most clinicians to be a good system for achieving consistent quality standards. This reflects the findings of McDonald et al (2008) and Campbell et al (2007).

Financial rewards attached to delivering the QOF targets appear to have been successful in achieving desired outcomes. This issue will be explored further in section 5.5 on incentives and rewards as the Quality and Outcomes Framework (QOF) constitutes a fundamental

income stream to GP practices that is dependent on achievement of pre-determined QOF indicators.

5.2.2 The Practice Development Framework (PDF)

A second performance management framework in primary care mentioned in the empirical findings was the Practice Development Framework (PDF). Analysis of documentation on primary care performance discussed in section 3.5 of the *methodology* chapter describes the framework as a learning and development tool to improve quality and standards in primary care and iron out potential inequalities. Reference was made to the framework by PCT directors, managers and clinicians, suggesting the PDF was key a priority for all disciplines. One PCT director summarised the PDF as:

PCT Director - *“a combination of measures covering a range of activities to give an overall picture of performance in primary care”*

The principal-agent theoretical framework can be used to explain these findings. Engaging all stakeholders during the development of a performance framework and subsequent monitoring techniques means objectives are more likely to be aligned and outcomes achieved at all levels within an organisation.

The practice development framework (PDF) builds on private sector principles and performance models such as the Balanced Scorecard (BSC) developed by Kaplan and Norton (1992;1996a). The model integrates four different aspects of performance: financial measures; customer experience; measures that focus on internal business; and innovation and learning. It explicitly links measurement to an organisation's vision and strategic objectives. In comparison, the PDF and subsequent Balanced Scorecard (BSC) incorporated a range of clinical indicators that linked with the organisation's priorities. These include: Coronary Heart Disease (CHD), Heart Failure (HF), Stroke, Blood Pressure (BP), Diabetes, Chronic Obstructive Pulmonary Disease (COPD), Cancer, Atrial Fibrillation and smoking cessation. Measures to assess compliance with statutory and contractual standards, patient experience and public health measures also formed part of the scorecard. Similar to the QOF, the practice development framework (PDF) supports findings from Kennerley and Neely (2002)

by inclusion of multi-dimensional measures agreed between stakeholders which reflect day-to-day business (Greiling 2006) and under the direct control of the clinicians and practice (McKenzie and Shilling 1998).

The empirical findings suggest that despite inclusion of multi-dimensional measures within the PDF scorecard there remained a potential weakness. Softer performance management information was omitted from the scorecard. Examples include; staff turnover, record-keeping, training and development, all of which have been identified as important factors for successful performance management (Armstrong and Baron 2004). This was mentioned by two PCT directors and a senior manager:

PCT Director 1 - *“Softer measures such as staff turnover need to be considered as much as harder measures as this can have just as important effect on quality of patient care.”*

PCT Director 2 - *“An excellent clinician working in a poor management environment could result in poor outcomes and poor quality”*

Senior Manager - *“A disorganised practice with really good clinicians often means performance looks poor because clinical data hasn’t been captured for example, so often one can hamper the other and vice versa”*

Analysis of documentation relating to the PDF and respective balanced scorecard indicated that financial measures had not been included. This was not reflective of performance management systems in the private sector such as the performance measurement matrix proposed by Keegan et al (1989) and Fitzgerald et al (1991). Most participants across the range of disciplines recognised a need for greater scrutiny of financial data in the future as clinical commissioning groups (CCGs) begin to take on direct responsibility and accountability for managing devolved budgets. This point was made by one PCT director:

PCT Director - *“I think this is why the coalition government has brought in GP commissioning and are making the consortia accountable for the bulk of NHS spend so they can challenge themselves through peer review. I think one of the things that is going to be a*

feature and very unwelcome for some is that there is going to be an element of self-policing because it will be necessary to stay within budget whereas at the moment it's the PCT's problem”

Further analysis of documentation on the PDF and academic literature highlighted additional factors successfully used in the private sector that were missing from the scorecard that could be included to strengthen and improve the performance framework. Purcell et al (2010) provides an example used in non-profit organisations where the use of a peer review system for evaluating performance demonstrated improved benefits such as problem solving, analysis, policy development and reflection of performance at an individual level. Lynch and Cross (1991) report on a performance management Framework known as the SMART (Strategic Measurement and Reporting Technique) pyramid which incorporates various measures as well as adding the concept of a cascade mechanism that enables measures to be used at an operational level. Other approaches include evaluation techniques (Hoefler 2000; Fine et al 2000) and outcome monitoring (Bozzo 2000) both of which could be applied to the primary care model. This is providing; a robust design, internal capacity and sophisticated data collection techniques are built in to the process. Peer review, cascade mechanisms, evaluation techniques and outcome monitoring could be adopted to strengthen the already well developed framework and help overcome the problems of *information asymmetry* and achievement of *goal alignment*.

Findings from the empirical research reflect recommendations from the academic literature on performance management systems used in the private sector. The following quotes from various participants support the need to adopt particular to improve performance and achieve goal alignment.

GPI - *“We get lots of data eg. Referral, prescribing, patient questionnaires and surveys, QOF; we're just not good at using the data to alter planning and outcomes”*

PCT Director - *“We're good at collecting information but not good at converting it into meaningful intelligence....”*

GP2 - *“Performance measures don’t always lead to the desired outcome...”*

SHA Director - *“Most indicators are designed with different functions in mind – the question should be: ‘are the indicators really achieving their aims?’”*

The principal-agent theoretical framework can be used to explain that by adopting a range of evidence-based approaches within performance management systems, goal alignment is more likely to be achieved.

5.2.3 Better Care Better Value (BCBV) Productivity

Performance Framework

The performance management framework used to promote discussion and explore understanding of performance data during the formal interviews was the Better Care Better Value (BCBV) Productivity Performance Framework. Local data on the clinical and prescribing indicators were used to generate discussion. Although Primary Care Trusts (PCTs) representing the principals were performance managed on these indicators, there was a reliance on GP practices as the agents to perform to a particular standard to deliver outcomes that would ultimately reflect the organisation’s performance as a whole.

Most PCT and SHA directors were aware of the BCBV productivity performance data compared with a minority of GPs who were not familiar with the clinical indicators. Most GPs and practice managers were familiar with the prescribing indicators. Although directors were generally aware of the BCBV performance indicators, only two were familiar with the PCT ranking across the Strategic Health Authority. This gives rise to several implications that are reflected in the academic literature and can be explained using assumptions of principal-agent theory.

First, clinicians were not generally aware of the clinical indicators which suggest that poor communication channels were a contributory factor to goal incongruity between the principal (PCT) and agent (GP practice). Second, although a priority for managers and directors, the principal (PCT) does not have control over the agent’s (GP) actions and performance. In this case referral and prescribing activity that results in information asymmetry between the two parties. This concept reflects the findings of Marshall et al (2000) who explain that desired

outcomes should be sufficiently influenced by the actions of the agent. Third, despite performance indicators being imposed and monitored centrally, GP practices were not fully aware of the framework or associated opportunity costs and managers were not aware of the local position or ranking suggesting this performance data was not a high priority. Neither was the data used locally to inform the commissioning process. This suggests lack of goal alignment throughout the NHS; from central government through to strategic management with senior managers representing the principal and clinicians representing the agent, with the latter expected to deliver outcomes on behalf of the organisation as a whole.

This reflects the findings of Bitici et al (1998) who explain the need for measures to be integrated across the organisation's functions and through its hierarchy, encouraging congruent goals; and Greiling (2006) who emphasises the need for consensus between stakeholders particularly in respect of KPIs. Another explanation for these findings could be that clinicians consider the BCBV indicators as measures of productivity only rather than measures of quality and therefore less inclined to be motivated to improve performance. This reflects the findings of Dixon (2000) and Campbell et al (2000) who explain that a suite of performance measures must incorporate elements of quality as well as productivity. Another explanation supportive of these findings is outlined in Kravchuck and Schacks' (1996) design principles for a performance management system. The measurement strategy in the case of the BCBV performance framework was not explicit, did not involve key users at the design stage and adequate detail was not available to all users. A final explanation for the lack of improvement in these indicators may be due to the lack of incentives attached to delivering the outcomes. However, as seen in section 5.3 with the Quality and Outcomes Framework (QOF) and Practice Development Framework (PDF) financial incentives in isolation are unlikely to achieve goal alignment. This is discussed in more detail in the section 5.5 on incentives and rewards.

Despite the lack of awareness of the BCBV performance framework by clinicians, once an explanation was provided, the majority of participants across all disciplines ranked the importance of the indicators on average as four out of five with GPs on average ranking them slightly lower than the managers and directors. This suggests that it might be poor communication channels leading to lack of awareness of the indicators rather than a

disagreement on the objectives leading to goal incongruity. This is described in Garson's hypotheses (2013):

“The less investment in principal-agent communication channels, the more the goal incongruity between principal and agent” (Garson 2013; pp.70)

Sharing the data during the interviews generated lots of discussion and questions suggesting a general interest across all disciplines. Emerging themes from the discussions are linked to the academic literature and explained using the principal-agent theoretical framework. The initial theme emphasised the need to use the data to ask questions; explore variation, promote a clinical dialogue and seek explanations of the data in a facilitative way. These findings reflect those of Goddard et al (1999) and the DH (2001) who emphasise the need to consider context and other *soft* data as well as the prescriptive indicators. This is essential to avoid data being misinterpreted (McColl et al 1998; Smith 1995). The concept was referred to on several occasions by participants across all disciplines and is summarised by two executive directors:

PCT director - *“Yes, it is important but it should be to imply that there is variation...the way these charts are presented implies that there is something not right which when shared with clinicians can put them on the defensive foot. They then spend all the time justifying why there might be variations and not actually owning the problem whereas if you asked them what it could mean they are more likely to relax and talk about it and initiate a clinical dialogue.....”*

SHA Director - *“It's about using the data to ask questions: Why is it that you've got worse by 33 points? What's happening now that has changed? Why does it appear that you are doing more procedures of limited clinical value than previous? Has anything changed to make this happen? It's not about saying they're wrong but about saying – why is this happening because there may be a good explanation for it.”*

These findings complement Kravchuk and Schack's (1996) principles of ensuring adequate detail is available to all users while considering the complexities of strategic (upstream) and operational (downstream) implications.

A second recurring theme from the interviews was how the BCBV performance management framework provides an opportunity for clinicians to understand the broader picture at a population level as opposed to an individual level. This supports the concepts defined by Bitici et al (1998) that measures should be integrated across the whole organisation to ensure goal alignment and Greiling (2006) to enable a greater likelihood of consensus between stakeholders. This issue was referred to on several occasions by managers and clinicians and can be summarised by one PCT director:

PCT Director - *“They’re a mechanism by which we can get clinicians to get some sort of population perspective and start to tackle it because clinicians tend to focus on their caseload and patients; what they don’t get is that a decision they make has an impact on someone else because there’s less money to go around or because they’re occupying a particular clinic space. Getting them to look at the global picture is very difficult.”*

A third prominent theme that emerged from the findings was reference to presentation of data and how it is used. A recurring theme arose across all disciplines was the preference for simple, colourful charts and graphs with additional information available if further explanations were required. Data presented in this way was more likely to be used to change behaviour, improve performance and achieve goal alignment. That is, providing other features such as; accurate, reliable and timely information that reflects quality of care (Kazandjian et al 1996; Dixon 2000; Campbell et al 2000) and avoids misinterpretation (McColl et al 1998; Smith 1995) and subsequent unintended consequences (Kerr 1975; Audit Commission 2000) are also incorporated into the system design.

Use of prescribing data was provided as an example of where performance data was used effectively by clinicians. De-anonymised data was a preference expressed by clinicians for the purpose of bench-marking and comparison with peers. There was a suggestion that data should be available at an individual level as well as at a practice level. Terminology was considered an important factor when developing performance indicators. For example: presentation using a RAG rating system or ranking according to quartile achievements was

considered by clinicians to be more threatening than standard deviations from average which were considered developmental and acceptable.

Performance can be affected by many different variables (Bull et al 1994; Leng et al 1999) such as; configuration of the local health economy (Brown et al 1995), socio-economic variations (Giuffrida et al 1999), case mix, co-morbidity and severity (Rigby et al 2001). These were concerns raised in the empirical findings across all disciplines where variation in performance was described as being due to: differences in organisations, practice infrastructure, social demographics and disease prevalence. Managers also explained variation as being related to historical custom and practice whereas clinicians made reference to patient demand and a lack of confidence among clinicians as contributory factors.

5.3 Barriers to Performance Management in Primary Care

Factors to consider when assessing potential barriers to performance management and achieving goal alignment in primary care include: (a) The relationship between managers and clinicians; (b) Understanding what constitutes autonomy and accountability; (c) Understanding the impact of contract inclusions and; (d) Use of sanctions and rewards with respect to both financial and reputational incentives. Understanding how these factors impact on former models of primary care-led commissioning and potential future impact are important issues requiring further exploration. These concepts are explained using the principal-agent theoretical assumptions of *information asymmetry* and *goal alignment*.

5.3.1 Relationship between managers and clinicians

Difficulties arise in the principal-agent relationship when information asymmetry and incongruent goals exist between the principal and agent. When the principal does not have complete information about an agent's performance, there is a possibility that the agent may misrepresent their competence or mislead the principal about their performance. This may be the case in healthcare for example due to the technical nature of the work where clinicians inevitably know more about their own actions and subsequent outcomes than managers. Additional problems can also occur in the relationship when principals and agents have

divergent aims and objectives. The following section uses the principal-agent theoretical framework to explain how the empirical findings described in 4.4.2 and the academic literature in 2.3.1 on use of performance management systems can be used to facilitate goal alignment.

Most PCT directors and middle managers believed the relationship between management and clinicians was hierarchical in nature with clinicians considered as superior in the hierarchy. Although some clinicians were aware of this view by managers, the general perception from clinicians was, there was not a hierarchical relationship and most recognised the need for skill mix within a team. The relationship was considered by managers as difficult to manage with a perception that clinicians carry a '*professional superiority*'. This was explained using achievement of academic and professional qualifications by clinicians, leaving managers in a difficult position to challenge the views of clinicians. This is summarised by two PCT directors:

PCT director 1 - "*A manager is subservient to the clinician because they cannot exercise enough clout over a GP...*"

PCT director 2- "*The Medical Profession has a natural professional superiority through academic and professional qualifications which implies a higher level of attainment.*"

The concept of '*professional superiority*' described in the empirical findings can be explained using the theoretical assumption of *information asymmetry* with clinicians as agents having an informational advantage through *academic achievement and greater knowledge* than the respective principals. Another explanation might be down to the experiences and perspectives of different professionals. This reflects the findings of Gibberd (2005) who refers to the attitudes of medical staff as being driven by cost, clinical significance and privacy whereas those of managers tend to be driven by minimising numbers of indicators and maximising utility. Smith (2002) describes the challenge of implementing policy as integrating the top-down instruments of performance management such as; standards, priorities and accountability, with a system of clinical networks; including professional concern with clinical quality, patient focus, peer review and continuous improvement.

A further point of discussion expressed by clinicians that supports the concept of ‘*professional superiority*’ was the preference of clinicians to be challenged on clinical areas of performance by individuals with relevant clinical expertise and credibility rather than a general manager not trained in that particular field. The example provided on several occasions by GPs was the challenge posed by pharmacists on GP prescribing behaviour. Principal-agent theory can be used to explain the perceived hierarchical relationship and ‘*professional superiority*’ by managers. Perceptions and beliefs such as this can act as barriers to achieving goal alignment resulting in the organisation as a whole not performing well or achieving its desired objectives.

PCT directors believed that conflict exists because clinicians are not trained as managers. They tend to focus on outcomes at an individual level whereas managers are more likely to focus on outcomes at a population level. An optimal mix of the two perspectives is required to achieve goal alignment.

5.3.2 Autonomy and Accountability

The empirical findings support the concept of Hans De Bruijn (2002) that autonomy and accountability go hand-in-hand. However, the empirical findings suggest a conflict exists between the two, due to a professional tension. The difficulty in achieving the correct balance between the two is recognised by McGrath (2001) who distinguishes between two types of autonomy:

- (a) ‘*Supervision*’ autonomy relating to organisational control by managers and
- (b) ‘*Goal*’ autonomy which relates to the extent to which organisational goals are free from managerial control.

Mannion (2007) recognises the tension that exists between the two concepts in other agency relationships such as; the Department of Health imposing central directions which conflicts with local decision making in local NHS organisations.

There was a difference in professional opinion on understanding and interpretation of the two concepts. For example, most GPs perceived the term *accountability* as being ‘*answerable*’

and ‘*autonomy*’ as ‘*devolved power or having the freedom to act*’. GPs and practice managers viewed accountability in the context of patients whereas managers and directors referred to accountability as ‘*being responsible for public money*’. The latter description was referred to on several occasions by directors in the context of future clinical commissioning arrangements with devolved budgets going to clinicians and GPs being expected to take on responsibilities equivalent to that of a Chief Executive. Such conflicts were recognised through by two PCT directors:

PCT Director 1 - *“It’s impossible to have someone not employed by an organisation being held to account with corporate responsibility especially when they have a vested interest in driving their bottom line.”*

PCT Director 2 - *“Historically commissioning models have allowed clinicians to step back from the accountable structure. Although the White Paper offers a degree of autonomy and flexibility it also requires accountability to ensure outcomes are delivered – it all feels rather high risk; untried and untested”*

The conflict between *autonomy* and *accountability* was recognised by clinicians as well as managers. One GP expressed concern over top heavy performance management stifling innovation:

GP - “micro-management of clinicians is counter-productive, stifles innovation, deters progress and will ultimately damage the profession in the long term”

Despite clinicians and managers agreeing that autonomy and accountability should go together, the findings suggest managers believe there should be greater accountability for clinicians whereas clinicians believe greater autonomy would lead to better performance. The latter preference by clinicians reflects the findings of Frey (2000) and Le Grand (2003) who found that enhanced autonomy can bring freedoms and flexibilities to improve motivation and subsequent performance providing that the concept is valued.

The findings reflect those of Marshall et al (2003b) with respect to the two management styles and have been described by Freeman (2002) as summative and formative mechanisms:

(a) Summative mechanisms involve a directive approach whose agenda is driven by shorter-term performance targets and delivery of the political agenda. These mechanisms tend to be used for purposes of external accountability and verification (Davies 1998; Rissel et al 1998; Smith 1995). The empirical findings suggest this was the preferred approach of executive directors who emphasised, the importance of performance management in relation to achieving objectives, being accountable to tax-payers, monitoring outcomes and improving standards. In contrast middle managers tended to take more of a formative position involving a greater facilitative approach as they made reference to the need for adopting a developmental mechanism to promote change and improve performance. The latter approach supports the findings of McGlynn (1998) and Goddard et al (1999) with respect to achieving internal quality improvement, building relationships, gaining trust and using peer support to facilitate longer-term changes in culture from within rather than imposing change from outside.

The different approaches can lead to conflict between different tiers of management as well as tension between managers and clinicians. One reason for the varying views can be explained by the experience and perspectives of the different disciplines. This is described by Gibberd (2005) who describes the attitudes of medical staff as being driven by; clinical significance and privacy; those of managers by minimising numbers of indicators and maximising utility and data managers and statisticians with precision and bias of measurements.

The conflict existing between autonomy and accountability and different management styles adopted depending on the professionals involved can be explained using principal-agent theory. Where conflict and tension exists between the two concepts and management styles it is unlikely that goal alignment will be achieved. This is because the agent not only has a different perspective and different values to the principal on desired objectives, they also have a different view on the approach which they believe should be used to achieving such objectives. These differences between the principal and agent will inevitably lead to dysfunction between stakeholders (managers/principals and clinicians/agents) and prevent the organisation from improving performance and achieving its desired goals. It is essential that

managers and clinicians are able to develop a range of techniques for working together on the same agenda to achieve consistent, overall objectives of the organisation.

5.3.3 Stakeholder Engagement and Goal Alignment

Garson's (2013) theoretical assumption helps to explain the importance of stakeholder engagement in achieving goal alignment:

“The more the goals of the selected agent are similar to those of the principal, the more outcomes will be sought by the principal leading to better goal alignment”

(Garson 2013; pp.70)

A recurring theme that emerged from the findings from managers and clinicians was the limited engagement of clinicians with performance management. Those that tended to engage did so through a reactionary process by invitation rather than by pro-active engagement mechanisms. Smith (2005) emphasises the importance of meaningful clinical engagement as being essential for successful goal alignment. In the discussion on performance management there was a consensus by clinicians of a lack of clinical involvement in the initial phases of development of performance management systems and targets. This is recognised in the literature which highlights the importance of stakeholder involvement early in the process (Locke 1968; Smith et al 2004) and integrating performance across all functions and levels (Bitici et al 1998) as being important features to achieve goal alignment.

Although the findings suggest that most managers are engaged with performance management there was a perception by some SHA directors that there remains confusion over how data should be used effectively to achieve the best outcomes. This reflects the findings from McKee and James (1997) that showed performance management often resulted in measuring what there was data for, whether or not it met the organisation's goals. As engagement, ownership and motivation are important features relating to successful incentive and reward schemes and achieving goal alignment, this topic will be discussed further in section 5.4.5.

5.3.4 Contract Inclusion and Goal Alignment

There was a belief by senior managers (principals) and clinicians (agents) that a facilitative, developmental approach was a more productive way of changing behaviour and achieving goal alignment than adopting a target-driven regulatory approach through use of contracts. Meeting centrally imposed targets was considered a barrier to achieving goal alignment between principals and agents especially as local commissioners have little influence over achieving such measures.

Although importance of outcomes was mentioned by two clinicians and one manager principals and agents believed that current systems and processes tended to focus on numbers (measurement) rather than taking an ‘*all-round*’ approach that would more accurately reflect performance and achievement of desired goals.

Garson’s (2013) theoretical assumption helps explain whether measures such as the BCBV indicators should be incorporated into the GP contract via the Quality and Outcomes Framework (QOF):

“The more performance outcomes are written into the contract the more successful the outsourcing leading to better goal alignment”

(Garson 2013; pp.70)

Although the Quality and Outcomes Framework (QOF) has already been discussed in section 5.3 on use of performance management systems in primary care, GPs referred to QOF throughout the formal interview process in response to various questions, suggesting this was of particular importance to GPs. Therefore the QOF forms an important part of the section on contract inclusion and goal alignment. An explanation for the QOF being a key priority for GPs may be due to the financial rewards attached to achieving performance targets within the framework. Incentives and rewards in the context of *goal alignment* is discussed in more detail in section 5.3.5. The suggestion of incorporating the BCBV clinical indicators into the national GP contract through the QOF was supported by one PCT director. This was however met with some resistance from three interviewees. Concerns related to the potential risks of this leading to perverse behaviour, unintended consequences and a conflict of interest as the

patient's advocate. These concerns were expressed in particular to the indicator on managing referral rates to secondary care. The following quotes support this point:

SHA Director - *“There would be concerns over how the measures could be incorporated safely due to potential associated perverse behaviour...”*

GP - *“To incentivise ‘to avoid certain things’ could be the start of patients being rationed by the back door.”*

PCT Director - *“This will lead to ‘gaming’ in the system. ‘How can I get my maximum points? Or how can I fulfil my contractual obligations?’ ”*

This resistance suggests that including indicators such as referral rates in the contract could result in reluctance of clinicians to become engaged with performance management. Goal incongruity across the organisation is likely to be the result rather than improving alignment of organisational objectives.

Although these findings conflict with Garson's (2013) theoretical assumption:

“The more performance outcomes are written into the contract the more successful the outsourcing leading to better goal alignment” (Garson 2013; pp.70)

They do support findings of the Audit Commission (2000) who explain that data collection relies on the goodwill of clinicians and are thus susceptible to manipulation, particularly when reward and censure depend on the results. McColl et al (1998) and Smith (1995) refer to the fact that data can be misleading and easily misinterpreted. By including the BCBV performance indicator on referral rates in the contract there is a danger that strategic behaviour by the agent may result in patients not being referred for specialist assessment even when this would be appropriate action which could result in poorer patient outcomes.

Although the above principal-agent theoretical assumption does not directly explain the empirical findings in isolation, an explanation may be that several principal-agent theoretical assumptions need to be applied for the theory to be used to successfully explain goal

alignment in primary care. In situations where there is scope for inappropriate behaviour and unintended consequences especially in complex systems such as in health care; several of the principal-agent theoretical assumptions need to be applied to achieve successful performance management. These include: contract inclusion, clinical engagement and ownership, value alignment and adequate communication channels; all essential features in achieving desired objectives.

Another reason for concerns with inclusion of performance measures such as referral rates within the contract can be explained using Garson's (2013) theoretical assumption that refers to complexity of processes:

“The more complex the process; the more autonomous and semi-autonomous units involved, the higher the information costs” (Garson 2013; pp.70)

This is likely to result in a greater goal incongruity and can be seen readily in healthcare organisations built from complicated infrastructures integrated with multiple, complex systems, and processes.

As well as the inappropriate behaviour and potential unintended consequences associated with including referral rates as a performance measure in the GP contract, clinicians expressed concerns over other confounding factors that could affect the measure. These are reflected in the academic literature that describes some of the confounding factors. Outcomes are affected by other variables (Bull et al 1994; Leng et al 1999); including configuration of the local health economy (Brown et al 1995); socio-economic variations (Giuffrida et al 1999); case mix; and co-morbidity and severity (Rigby et al 2001).

Another theme emerging from the findings, particularly from clinicians was the need for a greater focus on clinical care pathways rather than adding to what was described by one clinician as:

GP - *“a tick-box tool for policing purposes”*

This reflects the findings of Kazandjian et al (1996) who emphasise the need for data accuracy to reflect quality of care rather than simply quality of the data. Achieving value alignment and stakeholder engagement will subsequently result in goal alignment across all stakeholders and organisations. One Chief Executive emphasised the need for alignment of values to achieve desired outcomes:

“The contract is only the formality. It’s the values alignment that’s important. You don’t have to worry too much about what it says in the contract. If everybody is agreed that they want to do it, you almost never go back to the contract. You need it in the contract when somebody doesn’t want to do it actually.”

5.3.5 Incentives and Rewards and Goal Alignment

An incentive is defined as:

“something that encourages a person to do something or to work harder”

A reward is defined as:

“something given or received in return for what is done or for a service or merit”

(Oxford English Dictionary 2011)

Incentives and rewards constitute a fundamental component of the principal-agent theoretical framework where achievement of goal alignment between principals and agents depends on whether suitable incentives are in place. This section will draw upon the design features and problems associated with incentives and rewards using financial and reputational incentive schemes and relate these to the academic literature and empirical findings.

A recurring theme that emerged from the empirical findings across all disciplines was the need for incentive schemes to adopt SMART (specific, measurable, agreed, realistic, in acceptable timeframes) indicators during the design phase of a program. Although this is a feature associated with performance management systems, additional factors such as; having adequate ownership (Locke 1968; NAO 2008); and accurate and reliable data (NAO 2008) are just as important in terms of achieving desired outcomes. These features will be discussed in more detail later in the chapter.

Although quotes on this subject are referenced in the previous chapter, comments relating to recurrent themes across a range of questions are highlighted again in this section to support the points being made. Quotes either reflect the findings from the academic literature or highlight areas of conflict.

i. Financial incentives

A common theme that emerged from the empirical findings across all disciplines was that financial incentives are an important driver for changing clinician behaviour. However, it was also recognised that other mechanisms could be used as incentives for changing behaviour such as certificates, accolades and letters as described by one SHA director:

SHA Director - *“Incentives don’t just mean money. Certificates, accolades, letters etc can all be incentives.”*

Analysis of literature on the QOF indicates that pay-for-performance schemes can result in modest improvements in the quality of care for some long term conditions such as asthma and diabetes. There is however also a suggestion that quality of care for other conditions such as coronary heart disease was already improving prior to introduction of the QOF due to other national quality-improvement initiatives (Campbell et al 2007). Although financial incentives can change professional behaviour (Gosden et al 2001), clinicians were already improving performance without use of incentives. Comparison of indicators with associated financial incentives to those with no financial rewards attached showed no difference in performance, suggesting pay-for-performance programs may not necessarily be responsible for performance improvement (Campbell 2007).

Following introduction of the QOF, improvements in the quality of care reached a plateau one year after the schemes introduction (Campbell et al 2009). Although pay-for-performance programs appear to contribute to improving quality, financial rewards associated with achieving particular targets may require further scrutiny given some targets are achieved without the need for incentives. Even for incentivised indicators, once a particular level is reached, performance tends to plateau (Campbell 2007). It has been suggested that gains in

quality after the introduction of the QOF could have been achieved at a lower cost (Campbell et al 2007). This was reinforced by two GPs who believed many of the tasks required to achieve particular outcomes identified in QOF were already being undertaken before the QOF was introduced:

GP - *“.....One of the things I felt with QOF is that it gave me rewards which I had not previously had for doing what I was already doing. I may have had to change the format of what I was doing and I may have had to demonstrate it better but in terms of clinical activity I was already doing it!.....”*

Gp2 - *“....The other question is: ‘is it a good use of public money?’ – the new GP contract resulted in a huge amount of public money being thrown at trying to improve standards of care which were already being achieved!”*

One PCT manager highlighted that awarding money to practices in isolation would not drive up performance:

PCT Manager - *“Throwing money at poorly performing practices is not the answer to improve performance. Targets need to be practice specific recognising that practices are different.”*

These findings suggest that while financial rewards can be used to change behaviour (Gosden et al 2001; Epstein et al 2004) and where on-going monitoring is established, improve quality of care (Asch et al 2004); other factors play just as important a role in motivating clinicians and improving performance. It is essential that additional factors such as clinical engagement, ownership and motivation are explored and understood if organisational goals are to be achieved.

ii. Engagement, ownership and motivation

A recurring theme emerging from the empirical findings, mentioned in sections 5.4.3 and 5.4.4 on stakeholder engagement and contract inclusion respectively, is that of *clinical*

engagement. A more detailed discussion of these concepts is provided in this section. *Clinical engagement* was a term used repeatedly across all disciplines throughout the formal interview process. Understanding the drivers that motivate clinicians to become engaged in performance management is important if a change in behaviour and goal alignment is to be achieved. A chief executive described some of the factors that motivate individuals:

Chief Executive - *“Different people are motivated by different things. For example: Financial incentives; goal attainment; altruism; ‘being super-duper’; research and personal development; more pounds in their back pocket....”*

A similar view was expressed by a SHA director who described how financial incentives in isolation are often unsuccessful:

SHA Director - *“It’s not as simple as chucking money at it. Money is one driver, being able to demonstrate high quality is another and being able to show that you’re above average is another. Making doing the right thing easy and the wrong thing hard are others..... Often it gets down to a simple: ‘you get the money if you do it and you won’t if you don’t.’ We need to get more sophisticated.”*

The findings reflect the academic literature which suggests involving employees in agreeing objectives and designing incentive programs is more likely to result in greater commitment and motivation towards achieving mutually agreed goals (Locke 1968; NAO 2008).

This perspective varied between clinicians. Some clinicians explained that although some practices were already performing to a high standard, others were not and the QOF was a tool for standardising practice performance across the board. This point was made by one GP:

GP - *“QOF indicatorshave enabled a standardised approach and identification of patients who were perhaps not previously being reviewed”.*

The latter finding corroborates that of McDonald et al (2008) who found that clinical opinion of the new contract was largely positive explained largely by the ability to use the contract to improve recording of information through standardised templates. Ryan et al (2012)

recognised that although the effects of the QOF were modest at practice level, process improvements appeared to have led to improvements in population health.

iii. Goal alignment across teams and organisations

A third feature associated with successful incentive schemes is the need for programs to be designed which align rewards with the values and goals of providers and key stakeholders through engagement and constructive dialogue. This enables commitment, understanding and respect to achieve the desired outcomes for patients. Professional motivation alone may not be sufficient to improve the quality of care. Sustained improvement in performance and quality involves a range of health care providers (physicians, nurses and administrators) and a combination of factors including: clear goals, good teamwork, and effective leadership (Campbell et al 2005). Clarification and understanding of the operating values and intrinsic needs for competence and autonomy of professionals is essential if financial incentives are to be used to provide extrinsic motivation (Buetow 2008). This point is supported by one Chief Executive's comment about the importance of *values alignment* in the context of *goal alignment* across teams and organisations:

Chief Executive - “..... *it's the values alignment. If everybody is agreed that they want to do it.....*”

The same Chief Executive emphasised the need to understand the key drivers across groups and individuals as summarised in the comment below:

Chief Executive - “.....*Understanding the key drivers for practices as groups and individuals within that is essential.*”

In a similar vein, a commissioning manager made reference to the importance of aligning objectives across organisations if desired outcomes are to be achieved:

PCT Manager - “*It comes down to understanding how each indicator affects outcomes. Practices will have their own vision and objectives which often do not align with those of the*

PCT because they don't serve their purposes or achieve what they want to achieve as an organisation. We need to improve on understanding and aligning objectives across organisations such as the PCT and practices.”

Makinson (2000) highlights that influence over outcomes are often only available at the level of the team rather than at the level of the individual agent. This is pertinent in general practice, particularly in relation to the QOF where many targets relate to management of long term conditions and tasks undertaken by practice nurses and healthcare assistants on behalf of GPs. This can create tension between members of the practice team where it may be perceived that lower salaried members of the team perform tasks on behalf of the partners who benefit most from the financial rewards associated with achieving the targets. This was alluded to by one GP from a large practice with several partners:

GP - “.....*There is a lack of understanding of the GP contract and there is always a tension and perception that GPs get rewarded through QOF for example by other members of the healthcare team such as practice nurses or treatment room nurses undertaking the work....”*

This perception conflicts with that of McDonald et al (2008) who found practice nurses in larger practices considered the contract as an opportunity to improve quality by aligning the contract targets with their own personal goals and improved outcomes for patients. This suggests practice nurses are less inclined to be incentivised by money and more likely to change their behaviour and improve performance through professional standards and delivering outcomes for patients. The same study did however demonstrate that healthcare assistants as the most junior members of the practice team did appear to be the least satisfied with the new contract arrangements where it was perceived that rewards were not a reflection of effort and thus ran the risk of reducing good will and motivation. For financial incentives to be successful in influencing behaviour of professionals, performance measures and respective rewards need to be aligned to the values and beliefs of the staff being rewarded (Marshall et al 2003a; Spooner et al 2001) which will involve working together as a team with effective leadership (Campbell et al (2005).

This suggests goal incongruity exists not only between managers and clinicians and between organisations but also among healthcare professionals internally within a practice. This study was not designed to explore this relationship. This would require a separate study which is described in more detail in the concluding chapter in section 6.4 on *Recommendations for future academic research*.

iv. Sanctions and Performance

A sanction is defined as:

“a threatened penalty for disobeying or not complying with a law”

(Oxford English Dictionary 2011)

A barrier identified by managers was the difficulty imposing contractual sanctions on under-performing practices. This raised further debate on whether the imposition of sanctions by managers or principals would actually change the behaviour of clinicians or agents to improve performance.

The subject of sanctions was raised only by various management participants including a non-executive director, a chief executive, and a senior manager throughout the formal recorded interviews. These are summarised to understand the point being made:

CEO - *“alternatively the practice could be down-right lazy and taking every penny possible. This is where the practice should be dealt with through sanctions.”*

Senior Manager - *“There are no penalties for not complying with the targets in QOF and practices can always justify their behaviour by saying they’re not aspiring to a particular target.....Most of the contract is based on reward with no real sanction. There needs to be a link with QOF back into the contract with appropriate sanctions.*

PCT non-executive director – *“....any other provider would require a service specification, outlining monitoring requirements, performance review and improvement and sanctions when standards fall”.*

Despite these references to the use of sanctions in the empirical findings, there appeared to be a dearth in the literature on the use of sanctions in the public sector. This was supported by a comprehensive review undertaken by the National Audit Office (NAO 2008) on: *The use of sanctions and rewards in the public sector*, where there was little reference to use of sanctions in public sector organisations. The vast majority of the literature focussed on incentives rather than sanctions. Explanations for this may be that; use of sanctions is not considered important to achieving goal alignment, or sanctions are too difficult or politically unpopular to implement. Either way, the empirical findings suggest use of sanctions in the public sector needs further exploration and research.

v. Influence over desired outcome

Another theme that emerged from the academic literature relating to successful sanction and reward schemes was ensuring the agent had direct influence over the desired outcome and incentivising these for sources of variation (Marshall et al 2000). Examples of performance indicators perceived as being ‘*out of the control*’ of the agent which emerged from the empirical findings were highlighted by two GPs. The first made reference to general referral data and the second provided a more specific example in cardiology referral rates, where the practice was penalised for the inappropriate behaviour of other stakeholders, in this case the main secondary care provider:

GP1 - “..... *secondary care is still generating its own referrals. It’s not very fair to place that burden on practices....*”

GP2 - “..... *we stopped referring anybody for an ECG to secondary care and explained that an echo was not a full cardiologist opinion requiring a full cost. So you can be penalised in primary care for things that you are not even aware of.....*”

GP2 - “.....*half those cardiology referrals were internal referrals within the Trust. So you might look at a practice and say, ‘why are you an outlier?’ and they may say ‘we had no knowledge of that, we didn’t even know that was happening in terms of referrals’.*”

The clinician explains that this type of behaviour and data analysis makes individuals become suspicious of the data which is then counter-productive.

This example demonstrates how principal-agent theory can be used to explain different situations and relationships depending on the function being undertaken. In the situation outlined above, the GP has theoretically taken on the role of *commissioner* or *principal* and is scrutinising performance data to challenge the *provider* or *agent* on performance. In this relationship, the theoretical assumption of *information asymmetry* has shifted in favour of the hospital or agent as the main provider. In light of the new NHS reforms, this relationship will become more important and is therefore discussed in more detail in section 5.5 on reflections and future challenges. The relationship between CCGs (as principals) and Foundation Trusts (as agents) is another example of future research where principal-agent theory can be used to explore and understand issues relating to *information asymmetry* and *goal alignment*.

An important design feature of a sanction and reward scheme is that the value of the sanction or reward scheme needs to be sufficient to motivate agents to the desired behaviour (Prentice et al 2007; Makinson 2000; Rosenthal 2005). This was reflected in the empirical findings where one PCT director believed there had to be some form of incentive attached to a desired goal. This should not only be financial in nature but should be worthwhile with respect to the amount of effort required to achieve the desired outcome. This is summarised in the following quote:

PCT Director - *“The incentive, if it’s financial has got to be worth doing because if practices are going to go for some target there is in itself inherently a cost to that for the practice. Either you are going to do more of something or you have to drop something to do that, so there has to be an appropriate incentive that’s negotiated between the PCT and the practice....”*

This view was corroborated by a Chief executive who emphasised the need for greater sophistication when developing reward schemes:

CEO - “.....*There needs to be a greater sophistication about gauging who you are talking to but most importantly the measures must be appropriate and worthwhile and be associated with a meaningful reward....*”

In a similar vein, one GP believed that some targets were just too difficult to achieve in particular populations:

GP - “*If it is made part of QOF it has to be worthwhile doing but not so large that you would do something perverse in order to achieve it. It is not always worth chasing if your population dictates that it is not achievable...*”

This suggests that unless rewards are meaningful and worthwhile to practices, desired outcomes will not be achieved. Practices may choose not to chase more difficult targets and concentrate on ones that are achievable in their patient populations. The workload involved for practices to submit datasets across various performance frameworks can be complex. This may explain the reasons for rewarding practices for the additional effort. This explanation is supported by Radnor and McGuire (2004) who refer to the difficulties associated with multiple types of performance management systems and the need for these to be managed in an organised and co-ordinated fashion to avoid problems of ‘*information overload*’ and ‘*wasteful bureaucracy*’.

Another explanation for practices not achieving their desired outcomes may be due to the demographics of the population they serve. Recent studies exploring the impact of the Quality and Outcomes Framework (QOF) on health inequalities suggest outcomes are poorer in the more deprived populations. Dixon et al (2012) found a lack of difference between the most deprived practices in Spearhead (in more deprived areas) and non-Spearhead organisations suggesting that area-based initiatives to tackle inequalities had not had an observable impact on deprived practices. Boeckxstaens et al (2011) describes the evolution of pre-existing (in) equity in health care after the introduction of the QOF while Addink et al (2011) found that following the launch of the QOF, practices with higher deprived populations or those with a high ethnic minority were perceived as offering worse access and were less likely to achieve improvement. Alshamsan et al (2010) found that inequalities in

chronic disease management had persisted following the introduction of the QOF and Ashworth et al (2007) identified shortfalls in specific clinical and non-clinical QOF indicators in more deprived areas.

Despite these findings from the academic literature, one GP felt strongly that clinicians needed to take some responsibility for their performance and refrain from blaming their patients and social demographics. This point is highlighted below:

GP - *“As a GP it’s easy to blame your patients – ‘they’re really unhealthy; they smoke too much; they drink too much or they’re really badly off so don’t come and see me.’ Social demographics are part of it but the major part is the way primary care operates in different practices.....”*

“.....If you run a decent general practice and patients have faith in your judgement and opinions then I believe you can level out this variation more effectively.”

“.....GPs need to take some blame because there are some practices in deprived areas with better outcomes – proof that it’s the practices responsible for the differences and not the poor lifestyles of patients and general global health of the population.”

Principal-agent theory can be used to explain the empirical findings by applying the concept that agents need to have influence over the desired outcomes if they are going to achieve goal alignment.

vi. Performance, care pathways and regular review

Another design feature of effective incentive programs associated with improving goal alignment is measuring all aspects of performance that contribute to overall outcomes. This is to avoid some objectives being omitted that may relate to organisational objectives (Kaplan and Norton 1992) at the expense of those associated with a financial reward (Makinson 2000). These aspects need to be balanced with ensuring targets are kept to a manageable level (Makinson 2000).

Findings from the documentation, formal interviews and data triangulation indicate that the main performance framework for GPs was the Quality and Outcomes Framework (QOF). This performance framework conflicts with some of the design features outlined above. Although the framework covers a range of targets, some of these do not necessarily relate to patient outcomes, many are not integrated into care pathways, and 134 targets does not support the definition of a “manageable number” as described by Makinson (2000). This was referred to by a PCT director as summarised below:

PCT Director - *“There are too many things in QOF already...”*

There was a perception from one PCT director that there needed to be greater focus on quality and care pathways rather than specific QOF indicators which often drives the conversation about money. This is summarised below:

PCT Director - *“.... the problem is contracting conversations begin around the money rather than the care pathway or outcomes. Quality and care pathways should come first and the money and contracting should follow rather than the other way round.”*

One GP referred to QOF as a tick-box exercise for the practice to earn money rather than a framework for improving clinical care. The following quote supports this point:

GP- *“Negative effects include focussing on one area at the expense of other important areas and also it is not a very motivational tool as it often feels like a ‘tick box’ exercise to earn money for the practice rather than for the good of patients.....”*

“..... As long as clinicians work to appropriate evidence based care pathways then it should be considered appropriate. It must be considered based on a clinical care pathway rather than simply a policing system.”

An explanation for these findings might be: that a high standard of performance across a broad range of targets should be expected to warrant such significant financial rewards. This supports the recommendation of Prentice et al (2007) who suggest that high intensity sanction

and reward schemes where compensation strongly depends on performance are more suited to systems where multiple objectives and outcomes can be easily measured.

Measuring compliance with a clinical care pathway could prove more difficult due to the various steps involved and potential confounding factors that may distort the results with respect to outcomes. Research suggests that rewards attached to this type of program ought to be of lower intensity, such as operational or reputational schemes where only a limited amount of compensation is tied to performance (Burgess et al 2005b).

Findings from the empirical research suggest that the current system is too complex with regard to performance and incentives and would benefit from a review. One GP suggested replacing the current model by building in performance management and personal development as part of the professional responsibilities and process of re-validation:

GP - *“..... Performance measurement has gone too far. My daily performance should be acceptable through my own professional obligation. It should be tied into professional re-validation rather than having to spend time on top of a 70 hour week dealing with performance indicators which erodes quality of life and makes a lesser professional”.*

A PCT director believed there were too many schemes, including local and directed enhanced services that are associated with financial rewards. They should be rolled into a single performance framework. This point is made by the following quote:

PCT Director - *“Current incentive schemes are problematic in that there are too many. For example: The current LES's and DES's. It's too complicated and may have local variation regarding standards and payments and they often take an inordinate time to organise. They should all be rolled into a single scheme instead of having lots of bits and pieces.”*

The literature and empirical findings suggest the current system of performance management in primary care is in need of review. Ongoing review is a design feature highlighted by the Government Accountability Office (GAO 2006) as being associated with successful incentive programs and subsequent goal alignment. This approach enables programs to be assessed in terms of effectiveness and facilitates the flexibility to allow changes relating to design flaws.

This concept was supported by one PCT director as summarised:

PCT Director - *“Yes – we probably need a refresh of QOF – dropping some indicators and bringing in the BCBV ones....”*

One SHA director corroborated these findings through highlighting a need to review or retire particular targets over time:

SHA Director - *“You must always think what you are hoping to achieve and at what point does delivering a target become routine. That is; Part of what you are doing no longer requires any sort of reward attached to it. There’s something about ‘retiring’ certain targets after a couple of years and replacing them with something else. You’d still need some sort of global target that says you must maintain certain levels and standards of course.”*

However, the difficulties and conflicts of adopting a centralised system with universal coverage need to be balanced with local flexibility to enable innovation. This is challenging in an environment of constantly changing clinical evidence and prioritisation. This was highlighted by a Chief Executive:

CEO - *“There will never be universal agreement on the perfect suit of measures due to a continuous developing system involving human beings and the ability to generate and understand is always changing. Current practice and measures mandated by a system will always be a few steps behind optimum – there is always a trade off between reliable, universal coverage and innovation. The system constantly changes priorities leaving a difficulty in developing and implementing measures which catch up and address the new priorities”*

The empirical research supports the findings from the academic literature through recognising the difficulties in measuring performance across complex, clinical care pathways. Trying to attain a minimum standard of performance without stifling innovation is an area of challenge and potential conflict. Regular review of performance management systems is required to ensure some elements of quality of care are not achieved at the risk of leaving

others behind. The principal-agent theoretical framework can explain these findings as challenges that need to be overcome to achieve goal alignment.

vii. Strategic behaviour and unintended consequences

An important aspect of successful sanction and reward mechanisms highlighted in the academic literature is that of ensuring that measured outcomes lead to overall desired outcomes. Although short-term outcomes can be more easily measured and show benefits, they should also demonstrate a clear correlation with positive long-term outcomes (NAO 2008). Doran et al (2011) found that improvements associated with financial incentives seem to have been achieved at the expense of small detrimental effects on aspects of care not incentivised. Fleetcroft et al (2012) identified a disconnect between incentive and health gain which risks supporting clinical activities that are only marginally effective, at the expense of more effective activities receiving lower incentives.

This point was supported by one PCT director who made reference to difficulty developing a perfect suite of measures due to the complexity of inter-dependent factors:

PCT Director - *“.....you can't isolate only the things you want and exclude those you don't want because things are inter-dependent. The best you can do is develop a range of proxy measures to try and encourage the things you want. There's no such thing as a perfect KPI.”*

Another important consideration that emerged from the literature in relation to developing sanctions and reward schemes is that of potential unintended consequences and inappropriate strategic behaviour. One PCT director believed there would always be unintended consequences associated with performance indicators as summarised below:

PCT Director - *“There will always be unintended consequences from performance indicators.....”*

This was a recurring theme in the literature (Kerr 1975; Burgess and Ratto 2003) and numerous examples of such behaviour to achieve targets are provided. These include:

surgeons delaying placing patients on waiting lists following consultations to improve waiting time performance (Smith et al 2005); up-coding hospital discharges to increase reimbursements (Carter et al 1990); miscoding of diagnoses (Wynia et al 2000); differential registration of healthy patients (Newhouse 2002) and denial of surgery to high-risk patients (Hannan et al 1997). This concept of incentive schemes leading to unintended consequences and perverse behavior was supported by the empirical research.

The findings provide examples of where performance indicators have led to undesirable behavior and/or unintended consequences. A SHA director referred to use of inappropriate behaviour to enable practices to meet targets which would be ordinarily difficult to achieve:

SHA Director - *“Targets have led to practices becoming ‘creative’ and perverse behaviour. The first thing they do is to find a way of getting round the problem. They don’t find a way of dealing with it particularly if they have no chance of achieving the target. An example is through exception reporting where the practice fixes the system so they can reach the target. Single targets can also lead to distortion of care, such as not referring when they ought to be.”*

A PCT manager described exception reporting as strategic behaviour leading to unintended consequences:

PCT Manager - *“A couple of practices stood out as being high on exception coding when compared with all other practices. On further investigation, it was discovered that these practices were not following the rules. It was highlighted that they were disadvantaging these patients and creating health inequalities because they were not being called in for review...”*

Another example of strategic behaviour and unintended consequences was provided by a PCT manager with respect to the 4 hour access target:

PCT Manager - *“The 4hr access target had good intentions to diagnose, treat and discharge quickly however analysis of results and decision making may take longer than 4 hours which would be considered a breach of the target so to avoid breaching the target patients were*

often admitted which resulted in large numbers of zero length of stays which cost more money as well as unnecessary bed-blocking for patients who needed to be admitted – simply to hit the target”

An area of discussion supporting the same issue made reference to the BCBV clinical indicator on referral rates. This was a point of contention and concern by both clinicians and managers in terms of potentially generating perverse behaviour that could result in poorer outcomes for patients if incorporated into the contract. One SHA director stated:

SHA Director - *“There would be concerns over how the measures could be incorporated safely due to potential associated perverse behaviour. For example: If the average referrals over the year is looking high, patients may suffer if not referred appropriately simply because of the need to hit a target and receive an incentive.....”*

This perspective was echoed by another PCT director supporting the same point:

PCT Director - *“This will lead to ‘gaming’ in the system. ‘How can I get my maximum points? Or how can I fulfil my contractual obligations?’ ”*

A GP commented on the same issue, which supports the point being made:

GP- *“When developing performance frameworks there is often a lack of recognition that people will game the system – similar to restricting certain treatments by setting criteria but as soon as that criteria becomes common knowledge an individuals’ eligibility changes in order to meet the criteria.”*

One GP emphasised the need to consider performance indicators according to whether they are actually achieving the desired aims. Examples of indicators within QOF which demonstrate poorer outcomes for patients based on current QOF indicators were discussed:

GP - *“Most indicators are designed with different functions in mind – the question should be: ‘are the indicators really achieving their aims?’....QOF generates a payment for placing 95 year olds on ACE inhibitors who may not be best served by such an intervention...”*

An example provided by a clinician of what was described as *“an unscientific, non-evidenced based intervention”* within QOF was the anti-coagulation indicator for atrial fibrillation. At the time of the interviews this indicator did not distinguish between aspirin and warfarin as the recommended intervention despite significant differences in outcomes, resulting in an indicator which could incentivise clinicians to use the wrong drug.

Further examples from the empirical research of indicators where achieving a particular target could lead to either no improvement, or have a negative impact on patient outcomes that support this point are summarised below:

PCT Manager - *“24/48hr primary care access targets simply made GPs restrict booking and access in order to meet the target. Thus the desired outcome was not achieved and resulted in poor patient satisfaction”*

GP - *“Patient experience questionnaire is very questionable. It is very subjective, unreliable and involves such a small number of patients within a practice. It really is not a meaningful performance measure”*

SHA Director - *“Often proxy measures are used which do not give a full picture, for example: ‘90% of patients spending time on their stroke unit’ is the actual indicator used to measure performance when really we should be looking at whether patients get aspirin; a CT-scan; thrombolysis; swallowing assessment to avoid aspiration and pneumonia all with a balance on how often such interventions ought to be measured”*

The empirical research and academic literature indicate that poor performance indicators are not valued and can lead to inappropriate behaviour simply to meet pre-determined targets, whether or not objectives or outcomes are achieved. This suggests that with poor performance measures there can be a conflict between a pre-determined measure and the

desired outcome, where achieving the target could actually lead to a poorer outcome. In the context of the principal-agent theoretical framework, *goal alignment* may be considered to have been achieved if the pre-determined target is reached through use of financial incentives. However, this gives rise to a dilemma where achieving the target could result in poorer patient outcomes. A question that emerges from this dilemma is:

Is goal alignment achieved if performance targets are achieved?

A second question that emerges from this dilemma is:

Does attaining pre-determined performance targets result in achievement of desired organisational objectives?

This suggests that attaching significant financial rewards to indicators considered poor measures of performance and quality by both managers and clinicians can lead to unintended consequences and poor patient outcomes, particularly if financial rewards and respective targets are considered by the agent to be more important than patient outcomes.

Outcomes of this discussion give rise to another area requiring further research. There is a perception from participants throughout this study that improving performance automatically relates to improved quality. This concept was outside the scope of this study and therefore was not explored.

viii. Reward for improvement and achievement

A controversial area of discussion according to the empirical research and findings from the academic literature is whether incentives should be awarded according to achieving targets or percentage improvement. Rosenthal et al (2004; 2005) highlights that system design is crucial when considering whether incentives should be awarded to highly performing providers, to those demonstrating greatest improvement or to those that meet a performance threshold. Questions that need to be considered according to Rosenthal et al (2004) include:

- Will providers who have historically performed well and exceeded targets have no motivation or incentive to improve because they can receive the reward for simply maintaining their current position?
- Are poor performing providers who fall significantly below proposed targets likely to be de-motivated and have weak incentives to improve their performance when the target appears to be unrealistic?
- Will rewarding providers based on improvement de-motivate and disengage the best providers where improvement is likely to be substantially more difficult because of ceiling effects?

These issues indicate that development, implementation and monitoring of pay-for-performance schemes need to be balanced against respective costs and complexity (Rosenthal 2005). The empirical findings suggest that incentives should be awarded based on a combination of target achievement for the better performing practices and percentage improvement for those practices with little chance of reaching what would be considered to them as an unrealistic target. Developing measures that incorporate rewards based on a combination of the two aspects would help address some of the challenges outlined by Rosenthal et al (2004). This point is supported by one GP:

GP -*“It is very difficult to achieve the last few percentages if practices are already very high achievers. They’re never going to reach 100%. It is equally unfair to get someone at the bottom to get to the top. Rate of progress is probably more relevant. I think reflecting current achievement as well is important...”*

Another GP felt it would be unfair to reward performance based only on improvement for those practices who had already worked hard to achieve a high level of performance:

GP -*“This could lead to de-motivation of the good performers by bribing the poor performers”.*

One GP provided an example supporting the point made in the academic literature of how rewarding practices based on improvement had resulted in goal alignment and achievement of targets using the national health check:

GP - *“Percentage improvements are better because they can be assessed over a longer period of time. An example is the national health check which is a five year programme which offers screening of all 40-74 year olds. Many practices took a year to get that off the ground. If we were being measured at the end of year one, we wouldn’t have achieved that target and we were going to be slated for it. It would have probably dis-incentivised us for the remainder of the four years and we might not have bothered doing it.....”*

There was however, a conflicting opinion from one GP who felt that practices should at least reach a minimum standard of performance before receiving any financial reward or incentive:

GP - *“It’s not appropriate to award incentives on improvement because they may still be substandard so they should at least reach the PCT average before they are rewarded.”*

The empirical findings demonstrate how controversial the subject of incentives and rewards is and the difficulty of developing a scheme that is suitable for all agents. There was a belief across most professionals that incentives should be awarded according to both target achievement and percentage improvement. Agents should however achieve a minimum standard before an incentive is awarded. This is particularly relevant to poorer performing practices. There was also a view that if practices are to be rewarded, then there should be some measure of effort even if practices are already high achievers. This is to avoid maintaining a position of status quo without any incentive to improve further. If mechanisms are developed that achieve both these objectives, it is more likely that goal alignment will be achieved.

ix. Public release of performance data and goal alignment

Although it is increasingly common to release information about performance in health care, its effectiveness in changing behaviour of consumers, providers, purchasers or professionals

has not been determined (Ketelaar et al 2011). Despite the ability to use performance information for purposes of benchmarking and comparison with providers over time and against standards of good practice (Marshall et al 2000), only a minority of GPs felt that publishing primary care performance data would alter practice. In contrast, most managers believed that, being a tax-funded system it was important to inform the public of primary care performance. This supports the findings of Topol and Califf (1994) and Longo et al (1997) who refer to publically reporting data for accountability purposes. Despite the support from managers for publically reporting performance data, there must be assurance that information published is accurate with adequate explanation of its meaning, validated through other sources and used sensitively. Difficulties associated with these requirements explains the findings of Mannion and Goddard (2003; 2004) who found that releasing performance data was rarely cited a primary driver of quality improvements because of concerns over credibility, timeliness, lack of incentives and external accountability.

Public release of performance data generated significant debate during the formal interviews. Comments were received on the subject in response to several different questions. These are explored further in this section using quotes from interviewees where appropriate to support and explain the points being made. These are linked with key findings from the academic literature. Principal-agent theory is used to explain the challenges in achieving goal alignment.

Accuracy, timeliness and presentation of data were criticisms of the current system along with inconsistencies with performance indicators across different frameworks. Referral activity data was named as being particularly inaccurate and CHD indicators in the Quality and Outcomes Framework were inconsistent with the CVD performance measures being requested by the Department of Health. Principal-agent theory can explain why goal alignment is unlikely to be achieved due to different objectives.

A recurring theme across the range of disciplines included: concerns over complexity of information; difficulty understanding the data; and the potential to misinterpret information by the general public. These concerns are reflected in the academic literature (Hibbard et al 2010; Hibbard et al 2001; Magee et al 2003; O'Meara et al 2005; Peters et al 2007; Hibbard et al 2007; Jewett and Hibbard 1996; Hibbard et al 1998). The following comments from a range of interviewees explain this issue:

Non-executive director – *“Information can be used and misused depending on who is reading and releasing it.”*

GP 1 - *“Whilst ‘it may keep you on your toes,’ there are often good reasons for the data. For example: Emergency admissions. You would want to be careful that what is published is clearly explained as there is a danger the public could misinterpret the data.”*

GP2 – *“If released into the public domain, it has to be robust, reliable data which is reproducible and compares ‘like-with-like’ for PCTs and practices and done in a sensible way to avoid misinterpretation of the data...”*

PCT Director – *“.... providing data is accurate, meaningful and reflects good outcomes. Also that it is contextualised prior to release into the public domain. For example: If taken straight into a league table those who have made significant improvements but remain outliers will still get branded as poor; there is a danger of misinterpretation. It could be quite damning if you published information without adequate explanations and clear rationale and reasoning behind why they are there; it would just lead to disengagement with practices.”*

SHA Director – *“..... The problem is how well it is explained and how meaningful it is. For example: Some websites are available where patients can post comments and rate the practice but the numbers are very small and tend to come from extreme views from ‘fantastic’ to ‘awful’ experience, so the figures are not reflective of outcomes or quality. That is, you could have a five star practice based on three people’s comments!..... The problem is that of accuracy of what is being published and the statistical relevance of it.”*

Releasing performance data into the public domain raised further concerns from GPs in relation to differences in populations and social demographics. These differences differ significantly different between practices within the same locality. One GP summarised this by the following comment:

GP1 - *“It could be a negative thing because different practices often in the same area have different populations, different morbidities and different demands so comparisons might not be fair in respect of populations and demographics.”*

In a similar context, a GP made reference to the possibility of widening health inequalities using education system and school league tables as a comparison:

GP2 - *“It could possibly widen health inequalities similar to what’s happened in schools and education where inequalities exist because of competition for places in favoured schools and school league table’s influence where parents choose to send their kids to school.”*

Concerns over failure to adequately adjust for case mix in data sets have been reported in the academic literature (Werner et al 2005a; Dranove et al 2008; Bardach et al 2009).

This highlights the importance of, and difficulty associated with understanding and interpreting data correctly (Hibbard et al 2010; Hibbard et al 2001; Magee et al 2003; O’Meara et al 2005; Peters et al 2007; Hibbard et al 2007; Jewett and Hibbard 1996; Hibbard et al 1998). It can also impact on consumer decision making through problems with access choice (Schoen and Davies 1998).

In line with findings from Robinson and Brodie (1997) one GP referred to lack of trust in performance data as summarised below:

GP - *“.....So you can be penalised and appear to be penalised in primary care for things that you are not even aware of..... This sort of analysis begins to make you suspicious of all the data which is then counter-productive.”*

Marshall et al (2000) makes reference to doubts about the most effective level for reporting data. One GP corroborates Marshall’s concern by describing how his practice’s performance on cardio-vascular referrals and respective costs was challenged by the PCT. Further analysis established that the data was inaccurate as the provider was over-charging the practice due to inaccurate diagnostic coding.

Goldfield et al (1999) explains that one reason for the limited impact on decision making through public release of data is due to disinterest in the information by the general public. This concept was supported by one GP who provided an example of what he believed the general public are more likely to be interested in:

GP - *“Most patients are not really interested in performance data. They simply want convenience, transport, family being nearby and those sorts of issues.....”*

Consumer choice is one reason for publishing data. This has been demonstrated through various measures including: publishing surgical outcome data (Hannan et al 1994), encouraging patients to preferentially choose high quality health care providers (Hibbard 2009; Kolstead et al 2009; Werner et al 2009) and to assess performance of individual professionals (Marshall et al 2004; Fotaki et al 2008). One GP provided an example of how this approach could influence patients’ behaviour by influencing them to move practices:

GP- *“It may result in people fighting with their feet. For example: If a practice has high emergency admissions people may move to another practice which doesn’t?”*

A commissioning manager made reference to improving standards of general practice by publishing comparative data. Patients won’t know if they are receiving a good quality service, if they have never been exposed to anything different and have nothing to compare their own experiences and outcomes to:

PCT Manager - *“Yes showing the data and justifying standards through comparison is the only way to improve standards really. For example: We currently have a situation whereby a practice performing poorly achieves a high patient satisfaction as patients have nothing to compare to ie. They don’t know what they could have elsewhere unless they know what is out there which may encourage them to move. Patients don’t have that understanding of their neighbouring practice in terms of quality of services or outcomes.”*

This finding supports the use of public performance reporting to promote quality improvement (Longo et al 1997) and ensure accountability of provider organisations (Topol

and Califf 1994). The lack of agreement and diverse aims associated with public release of data make it difficult to identify evaluation criteria that can be used to assess its impact. This has led to failure to justify publishing this information (Marshall et al 2000).

5.4 Reflections and future challenges

Although the new commissioning arrangements and future potential challenges did not form part of the planned, interview schedule, timing of the formal interviews coincided with the new NHS reforms. This resulted in several participants making reference to the imminent changes and challenges ahead.

The empirical findings and academic literature are themed according to five key challenges ahead for CCGs in light of the new NHS reforms. These include: (a) Managing the conflict of interest (b) Maintaining financial accountability and managing the financial challenge in the current economic downturn (c) Ensuring CCGs have the appropriate skills to achieve successful primary care-led commissioning (d) Engaging all member practices and (e) Addressing variation and developing and implementing a system for successful of peer review. Each of these challenges are discussed in relation to the academic literature and empirical findings and explained using the principal-agent theoretical framework.

5.4.1 Conflict of Interest

Appropriate regulation is essential to managing conflict of interest from GPs as both commissioners and providers of health services. This will minimise strategic behaviour and unintended consequences that can result, as witnessed from former primary care-led commissioning models including GP-fundholding (Smith et al 2004; Croxson et al 2001; Audit Commission 1996; Mays et al 2000; 2001; Goodwin 1998). Conflict of interest with the new NHS reforms remains a concern as summarised by one PCT director:

PCT Director - *“It’s impossible to have someone not employed by an organisation being held to account with corporate responsibility especially when they have a vested interest in driving their bottom line.”*

Reference was made to the imminent reforms as *'rather high risk; untried and untested'* by another PCT director in the context of accountability:

PCT Director - *"Historically commissioning models have allowed clinicians to step back from the accountable structure. Although the White Paper offers a degree of autonomy and flexibility it also requires accountability to ensure outcomes are delivered – it all feels rather high risk; untried and untested"*

Examples from the academic literature and concerns from the empirical findings on managing conflict of interest can be explained using principal-agent theory and the assumption of *goal alignment*. Accountable and robust governance policies must be in place from the outset if unintended consequences are to be avoided and goal alignment achieved.

5.4.2 Accountability and the Financial Challenge

Whatever commissioning approaches are used, accountability and legitimacy arrangements within an organisation need to be clear and transparent (Smith 2005; Goodwin 1998).

Financial accountability under the new reforms must meet these requirements while at the same time ensuring that any decisions made can be justified. This point was supported by one PCT director who commented:

PCT Director - *"Absolutely, and if they don't they run a major risk of running out of money, losing credibility and losing the ability to make savings which they can then re-invest in patient services in their area."*

At the time of the study, the financial situation was identified by managers and clinicians as a significant challenge for clinical commissioning groups (CCGs). One GP who supported the CCG model of primary care-led commissioning believed former Primary Care Groups (PCGs) were successful with respect to clinical engagement, developing care pathways and using data to support practices. She remained sceptical however of whether this could be achieved under the new arrangements due to the financial situation:

GP - *“I don’t think we know which way commissioning is going to at GP level yet. If the financial climate wasn’t as it is now then I would say yes. If we were able to run it as we used to run Primary Care Groups we would be able to look at clinical disease areas, take the data into account and look at how we support best practice. Whether this is going to be a financial option over the next few years is an unknown.”*

Financial pressures could result in the organisation not achieving its desired goals due to limited available resources for investment in patient services required to achieve desired clinical outcomes. The principal-agent theoretical framework can be used to explain this. Robust financial plans that release efficiency savings will enable the organisation to address the financial situation and overcome this potential barrier to achieve goal alignment.

5.4.3 Organisational Change and Skill Mix

Primary care-led commissioning requires effective management and information support if it is to deliver core commissioning activities and achieve desired objectives. These activities include: Population needs assessment; service specifications; development and redesign; priority setting; resource allocation; contract negotiation and service monitoring, all of which require adequate management and support to be successful (Smith et al 2004). Although some managers recognised the need for a multi-disciplinary approach to commissioning, clinicians made little reference to this in the interviews, suggesting it wasn’t something they had considered. The lack of reference to skill mix by clinicians may be explained by the lack of training offered to clinicians in specialised areas such as: public health, finance, economics and contracting.

Given the range of specialties and skills required to achieve successful primary care-led commissioning, the question over why GPs have been given the responsibility to lead this process is a point worth considering. This, along with the costs of having to release GPs from their clinical work raises further questions over how the new primary care-led commissioning arrangements can be cost effective and deliver the proposed outcomes. One GP explained that the role should not be simply added on to the “*day job*” suggesting a need for significant commitment which would come at a significant cost:

GP - *“GP commissioning is not going to be a cheap option because it will need to be built into the day job. It’s not a lunchtime or evening activity so it will be about whose covering and how do you do that and that’s going to be costly.”*

Appleby et al (2010) highlighted that implementing such changes at a time when financial pressures on the NHS were increasing with large cuts in management costs would make it difficult to ensure effective change management is in place to support such proposals. This would potentially result in less attention being paid to identifying efficiency savings at a time when this should be a top priority for the NHS. An example of where organisational change impacted locally was provided by one practice manager who referred to a number of instances where she had attempted to contact a PCT manager only to be told that the person had moved on.

Practice Manager - *“the person had moved on and someone else was now leading on that particular work stream”*

This leads to confusion and delays in resolving outstanding issues. Principal-agent theory can be used to explain future challenges for CCGs with respect to organisational change and skill mix. Organisational change has resulted in loss of business continuity and key skills required for successful primary care-led commissioning and achievement of goal alignment. CCGs will need to ensure they acquire the essential skills to enable them to deliver their objectives and achieve goal alignment. These include skills to undertake: Population needs assessment; service specifications; development and redesign; priority setting; resource allocation; contract negotiation and service monitoring.

5.4.4 Engaging Member Practices

Meaningful clinical engagement was a recurring theme from the empirical findings and has been highlighted in the academic literature as an important factor to successful primary care-led commissioning and achievement of goal alignment (Smith et al 2005). Engagement of individuals and understanding factors that motivate people were features of performance management discussed in the empirical findings. Principal-agent theory can be used to explain this. Stakeholder engagement improves ownership and motivation which

subsequently results in greater likelihood of achieving goal alignment between principals and agents.

Managers believed that incentives awarded to clinicians acting as agents for commissioners are the cornerstone of all behaviour and it is these rewards that drive desired change. Use of incentives is one of a number of strategies that can be explained using principal-agent theory to achieve goal alignment between principals and agents.

Clinical Commissioning Groups (CCGs) are membership organisations where every GP practice is a member. A future challenge for CCGs will be to avoid problems encountered in the past that resulted in less organised, self-interested GPs tending to ‘free-ride’ on other, more committed, engaged practices (Hausman et al 1999). This issue continues to be a concern as summarised by one SHA director:

SHA Director - *“It’s quite a complex process and if you go where there are a lot of single-handed practitioners you may invent a thousand reasons why they are all single-handed but it means that they are not cohesive, and getting those people to understand that they are actually part of a system, they are not autonomous and unaccountable, and we do require them to benchmark themselves, be benchmarked and not to be judged.”*

Evidence from previous attempts to involve GPs and primary care teams in commissioning services supports this perspective. The degree to which GPs will be motivated to get involved in commissioning is unclear, beyond the small minority of entrepreneurial GPs who have been at the heart of primary care-led commissioning in the past (Dixon and Ham 2010). In the context of the principal-agent framework and reference to the academic literature and empirical findings, clinical engagement is important to achieve goal alignment. The degree to which the desired goals are achieved will depend on how successful the CCG is in engaging all member practices in the commissioning process.

5.4.5 Addressing Variation and Peer Review

Focussing on clinical decision-making and reducing variations in clinical practice across the NHS will provide significant opportunities to improve productivity. Reducing variations in clinical service delivery (as highlighted by the Better Care Better Value Indicators),

improving safety and quality and improving the prescribing and management of drugs, should be key priorities for providers (Dixon and Ham 2010), Ensuring patients receive added value and improved health outcomes from existing budgets is essential. One strategy to achieve this involves focussing on three key areas: (a) reducing expenditure on low-value interventions; (b) redesigning pathways (especially for people with long term conditions) and (c) avoiding unnecessary hospital admissions.

Although most interviewees considered the Better Care Better Value (BCBV) indicators to be important, most clinicians were not aware of the clinical indicators or the associated productivity opportunity costs. This suggests despite a national drive to use this data to tackle variation, priorities were quite different between principals and agents leading to goal incongruity between policy makers, PCTs and practices. As clinicians take on future responsibilities for the commissioning budget, this may act as an incentive for practices to focus on the BCBV indicators and achieving goal alignment through reducing variation and realising the associated opportunity costs.

Challenging peers and tackling variation is perhaps the greatest challenge for Clinical Commissioning Groups (CCGs). Evidence on peer review and subsequent challenge on performance in primary care is sparse, thus to some extent CCGs are entering into unknown territory which only future research and evaluation will provide answers.

Despite a dearth in the literature on outcomes associated with peer review, the empirical findings remained positive with both directors and GPs supporting the principal of peer review. There was a belief that peer review could be undertaken in a non-confrontational manner as summarised by two PCT directors:

PCT Director 1 - *“It will allow GPs to have a conversation about referrals or the like and to question performance of colleagues in a non-confrontational manner.”*

PCT Director 2 - *“It will encourage peers to ask questions over variance between practices.”*

A GP also believed it was opportunity to challenge peers and address variation:

GP - *“Peer pressure in one sense and peer support and guidance on the other hand will ultimately drag those outliers more close to the mean. That’s the driver for success or failure of what GP commissioning is about. It’s taking responsibility for your peer group.”*

Other directors believed that peer review and challenging colleague’s performance might prove to be difficult. This was summarised by a PCT director and a SHA director respectively:

PCT Director - *“Until a few months ago GPs were vehement that they would never scrutinise anyone else’s work but they’ve got no choice now.”*

SHA Director - *“I think it will but it won’t be easy. Until now PBC has been shy of confrontation over behaviours. The belief is that they’re there to advise on commissioning not actually change the way individual practices provide services and therefore have an impact on how they commission services.”*

In the context of the principal-agent framework, goal alignment will depend on the success of using peer review to address variation. It may be that *clinician-to-clinician challenge* demonstrates success in changing clinical behaviour that results in goal alignment. Managing conflict of interest and resolving financial pressures may be addressed automatically if peer pressure proves to be more powerful in changing behaviour than financial incentives and rewards. Only future research and evaluation of CCGs will provide answers to this question.

5.5 Summary

The framework outlined in figure 5.0 shows how the different sections of the discussion fit together in the context of the empirical findings, academic literature and underlying assumptions of the principal-agent theoretical framework.

I. Understanding Performance Management in Primary Care

The empirical findings suggest there is confusion between the terms *performance measurement* and *performance management* and they are often used interchangeably in the NHS. Findings from the study suggest the NHS tends to focus on things that are easy to measure at the risk of omitting important aspects of care that are more difficult to capture. The academic literature and empirical findings suggest performance management is more challenging than simply measuring pre-determined targets. The findings and academic literature suggest softer performance intelligence such as: training, multidisciplinary teamwork, communication and shared vision are just as important as harder, more tangible metrics in performance management.

II. Use of Performance Management Systems in Primary Care

Three primary care performance management systems were examined in this research: The Quality and Outcomes Framework (QOF), the Practice Development Framework (PDF) and the Better Care Better Value (BCBV) Productivity Performance Framework.

QOF reflects some features of successful performance management systems outlined in the academic literature. Lack of reference to the QOF by managers in the formal interviews suggests this was not a priority for this professional group; or outcomes were being delivered to an adequate standard irrespective of local performance management techniques. Concerns were raised by some clinicians over specific QOF indicators during the interviews as poor measures of quality. These could lead to poorer outcomes for patients, yet practices continue to be incentivised for achieving such targets. The empirical research suggests achieving the highest level of performance may not be desired if the effort required to achieve this is not considered worthwhile. Reference to achieving easier targets with associated financial incentives at the neglect of other important measures with no associated reward was a concern reflected in both the literature and empirical findings.

A locally developed learning and development tool to improve quality and standards in primary care (the PDF) included a range of performance indicators to reflect the organisation's clinical priorities and statutory, contractual obligations. Reference made to the PDF by managers and clinicians suggests key stakeholders were engaged in development of the framework demonstrating local engagement and ownership.

Similar to the QOF, the BCBV Productivity Performance Framework was a nationally developed framework to tackle variation and improve performance across a range of indicators. In contrast to QOF however, these measures were not financially incentivised and at the time of the interviews did not form part of the national primary care contract. Unlike the PDF the BCBV indicators lacked local clinical ownership and engagement. This suggests goal alignment depends on a number of factors which include; the influence of commissioners to engage clinicians; agreement on primary care performance indicators with policy makers; availability of incentives and rewards; and adequate communication channels. The level of trust between principal and agent depends on the degree to which information asymmetry can be overcome and goal alignment achieved.

III. Barriers to Performance Management in Primary Care

The empirical findings suggest that at general practice level there is a perceived hierarchical relationship between managers and clinicians. This is described in the as: '*professional superiority*'. Findings from the empirical research and academic literature suggest this could act as a barrier to improving performance and achieving goal alignment. Managers believed clinicians focussed on outcomes at an individual level and have difficulty understanding population health economics. Clinicians were more comfortable being challenged by an expert in a particular field rather than a general manager.

Findings that emerged from the conflict between *autonomy* and *accountability* suggested managers believed accountability as being to the tax payer whereas clinicians referred to accountability as being to their patients. Managers believed there should be greater accountability whereas clinicians believed that less '*micro-management*' would improve performance and innovation.

Findings from both the empirical research and academic literature suggest inadvertent use of incentives can lead to rewarding outcomes that result in unintended consequences. Although public release of performance data can be used to improve accountability there is a risk that data can be misunderstood and/or misinterpreted by the general public that could potentially lead to unintended consequences.

Chapter 6

Conclusion

6.0 The Research Question

The study addresses the following research question:

“How can the Principal-Agent Theoretical Framework be used to attain a better understanding of performance management in primary care?”

The purpose of the conclusion is to address the research question using evidence from the previous chapters. This is achieved by dividing the research question into the following three sub-questions:

a. Understanding of performance management in primary care:

How can the principal-agent theoretical framework be used to explain and understand the perceptions of performance management from the perspective of various professionals?

b. Use of performance management systems in primary care:

How can the principal-agent theoretical framework be used to explain the findings which emerged from exploring the use of performance management systems in primary care?

c. Barriers to performance management in primary care:

How can the underlying assumptions of the principal-agent theoretical framework; *information asymmetry* and *goal alignment* be used to explain the barriers to improving performance in primary care?

6.1 Understanding Performance Management

How can the principal-agent theoretical framework be used to explain and understand the perceptions of performance management from the perspective of various professionals?

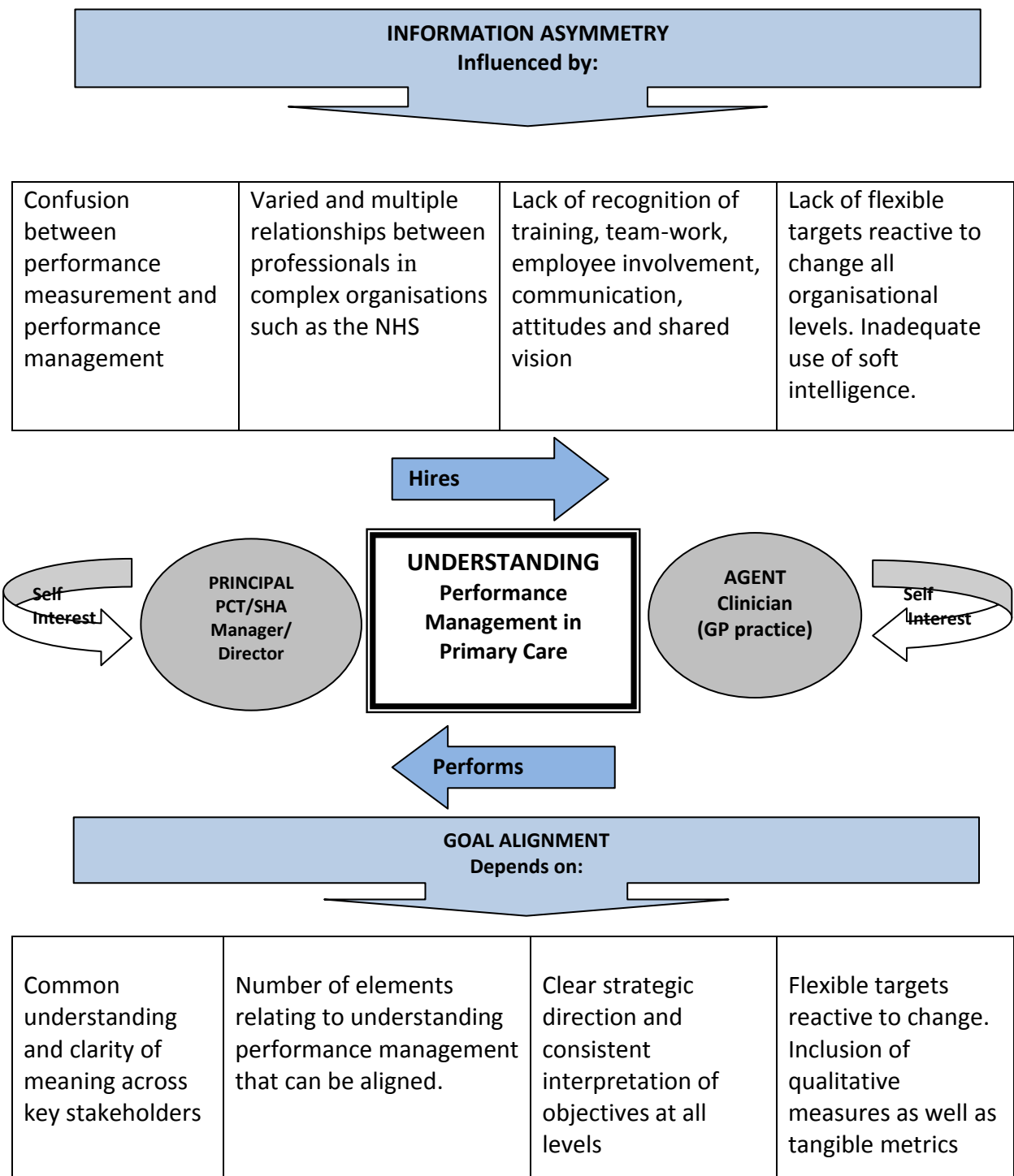
- i. Goal alignment depends on the degree to which a common understanding and clarity of meaning can be reached across all key stakeholders. The empirical findings suggest there is confusion between the terms *performance measurement* and *performance management* and they are often used interchangeably in the NHS. The two concepts are interpreted differently among different professional groups. Most managers referred to performance management as: '*achieving objectives and improving quality*' compared with most clinicians who described it as: '*benchmarking and comparison with peers*'. The confusion and different interpretation of the two concepts by clinicians and managers suggests different professional groups have different beliefs of what constitutes performance management and performance measurement. This may lead to different goals and behaviours depending on the understanding of the various professional groups. These are reported in the academic literature (Lebas 1995).
- ii. Goal alignment depends on the degree of clear strategic direction and consistent interpretation of objectives at all levels throughout the organisation. Although principal-agent theory suggests goal alignment can be achieved through agreement of shared objectives, in complex organisations such as the NHS, this study shows that it is unlikely in practice. In the NHS varied and multiple relationships exist between professionals that result in a complex web of information asymmetry and self-interest that need to be balanced against desired organisational objectives. According to the empirical findings, goal alignment will only ever be achieved in part and the degree to

which this is achieved depends on the level of commonality and agreement on understanding what constitutes performance management. In this situation principal-agent theory can be used to understand goal alignment if the following assumption is applied:

The greater the number of elements relating to understanding performance management that can be aligned; the more likely goal alignment will be achieved.

- iii. Goal alignment depends on use of qualitative measures and soft intelligence as well as tangible metrics as part of a performance management system. Flexible targets reactive to change at all levels within an organisation are essential to achieving successful goal alignment. According to the empirical findings the NHS tends to focus on things that are easy to measure rather than managing what is important. This may be because performance management is more challenging than simply measuring predetermined targets. Soft performance intelligence such as: training, multidisciplinary teamwork, communication and shared vision should be considered as high a priority as harder, more tangible metrics. This is supported by the empirical findings and academic literature which suggests measures for detecting deviations, describing status potential and tracking past achievements are delivered. However preoccupations associated with successful performance management systems such as training, team work, communication, attitudes and shared vision may prevent organisations from achieving goal alignment. Conclusions on understanding performance management are summarised in figure 6.0.

Figure 6.0: Use of principal-agent theory to explain the understanding of performance management in primary care



6.2 Use of Performance Management Systems

How can the principal-agent theoretical framework be used to explain the findings that emerged from exploring the use of performance management systems in primary care?

Three primary care performance management systems were described in the study: The QOF, the PDF the BCBV Productivity Performance Framework. These are considered in the context of trust; ownership and engagement; and incentives and rewards.

i. Ownership and Engagement

Goal alignment depends on the influence of commissioners on: local clinical engagement and local ownership; and on agreeing the primary care performance indicators with policy makers. Lack of reference to the QOF by managers suggests this was not a priority for them or outcomes were being delivered to an adequate standard irrespective of local performance management techniques. An explanation for this might be that as the framework forms part of a nationally negotiated contract there is little influence that can be applied locally to how this is delivered. Another explanation might be that the metrics included within the framework are so well resourced in the form of financial incentives that adequate standards are being achieved irrespective of the meaning or quality of the interventions.

Two issues that emerged from discussions on the QOF relate to financial rewards associated with the framework. The first refers to concerns over examples of QOF indicators considered by some clinicians as poor measures of quality. These could lead to poorer outcomes for patients, yet practices continue to be incentivised for achieving such targets. A second issue suggests performance can be improved without the use of incentives once a minimum standard has been reached. This may be due to the effort required to achieve further improvement exceeding the respective desire to make greater improvements. This was demonstrated in the academic literature by the plateau effect one year after the introduction of QOF. The number of indicators highlighted by some participants as excessive has, led to a culture of chasing targets rather than improving the quality of patient care. Reference to achieving easier targets with associated financial incentives at the neglect of other important

measures with no associated reward was a concern reflected in both the academic literature and empirical findings.

A locally developed learning and development tool to improve quality and standards in primary care called the Practice Development Framework (PDF) included a range of performance indicators to reflect the organisation's clinical priorities and statutory, contractual obligations. Reference made to the PDF by managers and clinicians suggests key stakeholders were engaged in development of the framework demonstrating local engagement and ownership. This was a recurrent theme in the academic literature.

ii. Trust

The level of trust between principal and agent depends on the degree to which information asymmetry can be overcome and goal alignment achieved. Performance frameworks such as the QOF and the PDF depend on agents inputting accurate and high quality information into a centralised system which in the case of the QOF results in a financial reward. As there is no requirement for practices to submit information on the BCBV performance framework either contractually or through use of incentives, the empirical findings suggest it is less likely that performance will improve unless suitable levers are put in place or additional support is provided.

iii. Incentives and Rewards

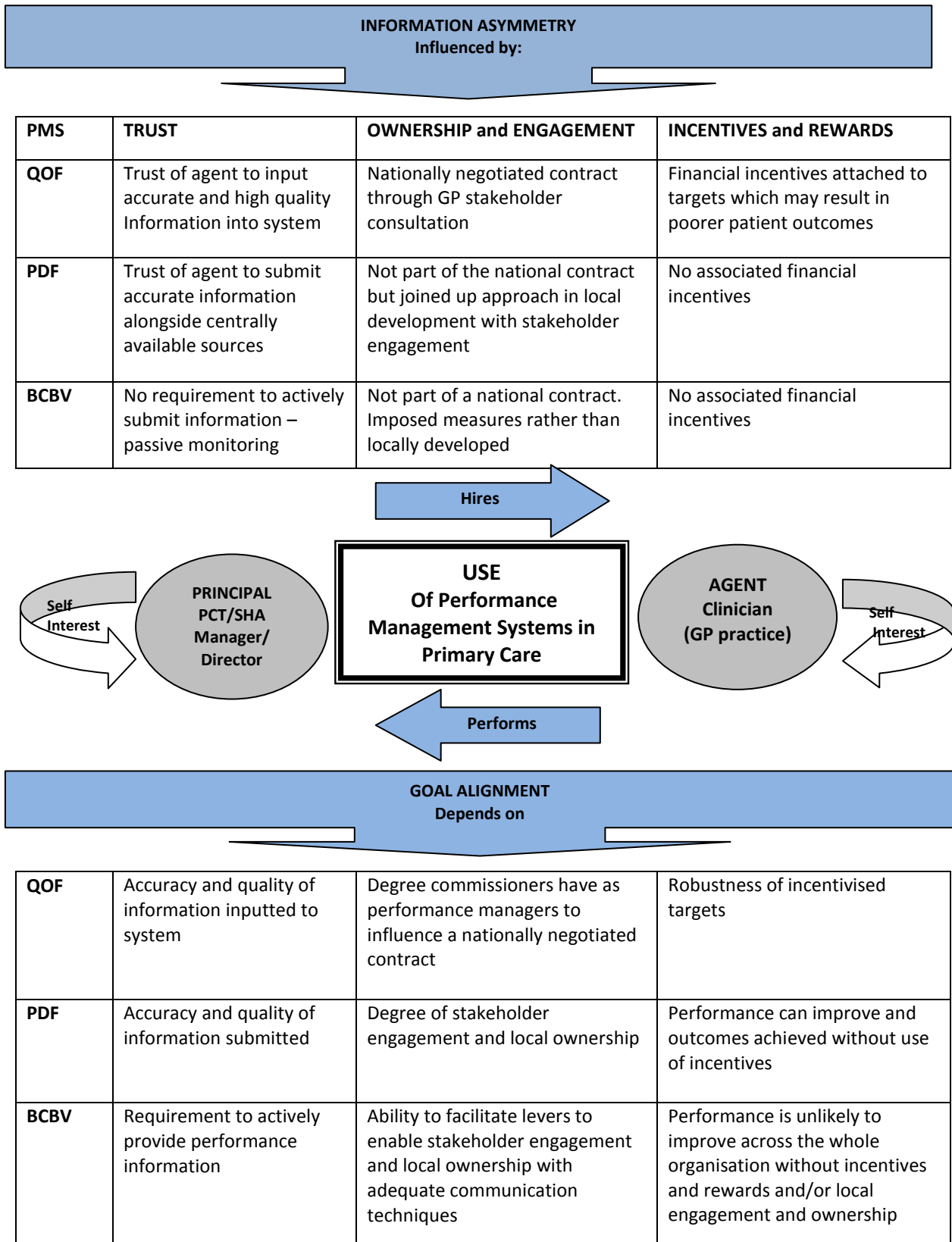
Goal alignment depends on: the degree of clinical engagement and ownership; availability of incentives and rewards; and adequate communication channels. Some QOF indicators were considered by clinicians as poor measures of quality that could lead to poorer patient outcomes yet continue to be incentivised. It is essential that indicators used to measure performance are robust and result in improved outcomes for patients especially if associated with a financial reward. Improved performance and goal alignment can be achieved without the use of incentives once a minimum standard has been reached. This has been reported in the academic literature one year after the introduction of the QOF. The locally developed learning and development tool known as the Practice Development Framework (PDF) to improve quality and standards in primary care demonstrated that goal alignment could be achieved without the use of incentives providing clinicians and managers are involved in the

process from the outset and in agreement with the proposed indicators and ongoing monitoring techniques.

In contrast to the QOF the BCBV performance indicators were not financially incentivised and at the time of the interviews did not form part of the national primary care contract. Unlike the PDF measures, the BCBV indicators lacked local clinical ownership and engagement. Although most managers were aware of the BCBV framework, clinicians were less familiar suggesting indicators were considered a higher priority to managers than for clinicians and/or the performance framework had not been adequately communicated and prioritised across all stakeholders (principals and agents).

The principal-agent theoretical framework is used to explain the conclusions on performance management systems in primary care which is summarised in figure 6.1.

Figure 6.1: Use of principal-agent theory to explain the use of performance management systems in primary care



6.3 Barriers to Performance Management

How can the underlying assumptions of the principal-agent theoretical framework; information asymmetry and goal alignment be used to explain the barriers to improving performance in primary care?

Potential barriers for improving performance and achieving desired outcomes in primary care are explored. These relate to various issues including: the relationship between managers and clinicians; understanding what constitutes autonomy and accountability; understanding the impact of contract inclusions; use of sanctions and rewards and understanding how these issues have impacted on former models of primary care-led commissioning.

i. Relationship between managers and clinicians

Goal alignment depends on the ability of stakeholders to overcome the divide between managers and clinicians. This involves addressing the concept of '*professional superiority*' and improving access to training for clinicians on health services management courses in areas such as: public health and health economics. At a practice level the perceived hierarchical relationship between managers and clinicians described in the findings as: '*professional superiority*' could act as a barrier to improving performance and achieving goal alignment. There was a belief by managers that clinicians focussed on outcomes at an individual level and have difficulty understanding population health economics. The differences in professional perspectives is reflected in the academic literature where medical staff are driven by clinical significance and privacy compared with managers who are driven by maximising utility. Clinicians were more comfortable being challenged by an expert in a particular field rather than a general manager.

ii. Autonomy and Accountability

Goal alignment depends on principals (managers) and agents (clinicians) agreeing with the overall vision and objectives of the organisation and ensuring the right balance is struck between accountability and flexibility to innovate, if goal alignment is to be achieved. Managers understood accountability as being to the tax payer whereas clinicians referred to accountability as being to their patients. Managers believed there should be greater

accountability compared to clinicians who believed that less '*micro-management*' would improve performance and innovation. This conflict is reported in the literature as a challenge of integrating the top-down instruments of performance management such as standards, priorities and accountability with a system of clinical networks; including professional concern with clinical quality, patient focus, peer review and continuous improvement (Smith 2002).

iii. Incentives and Rewards

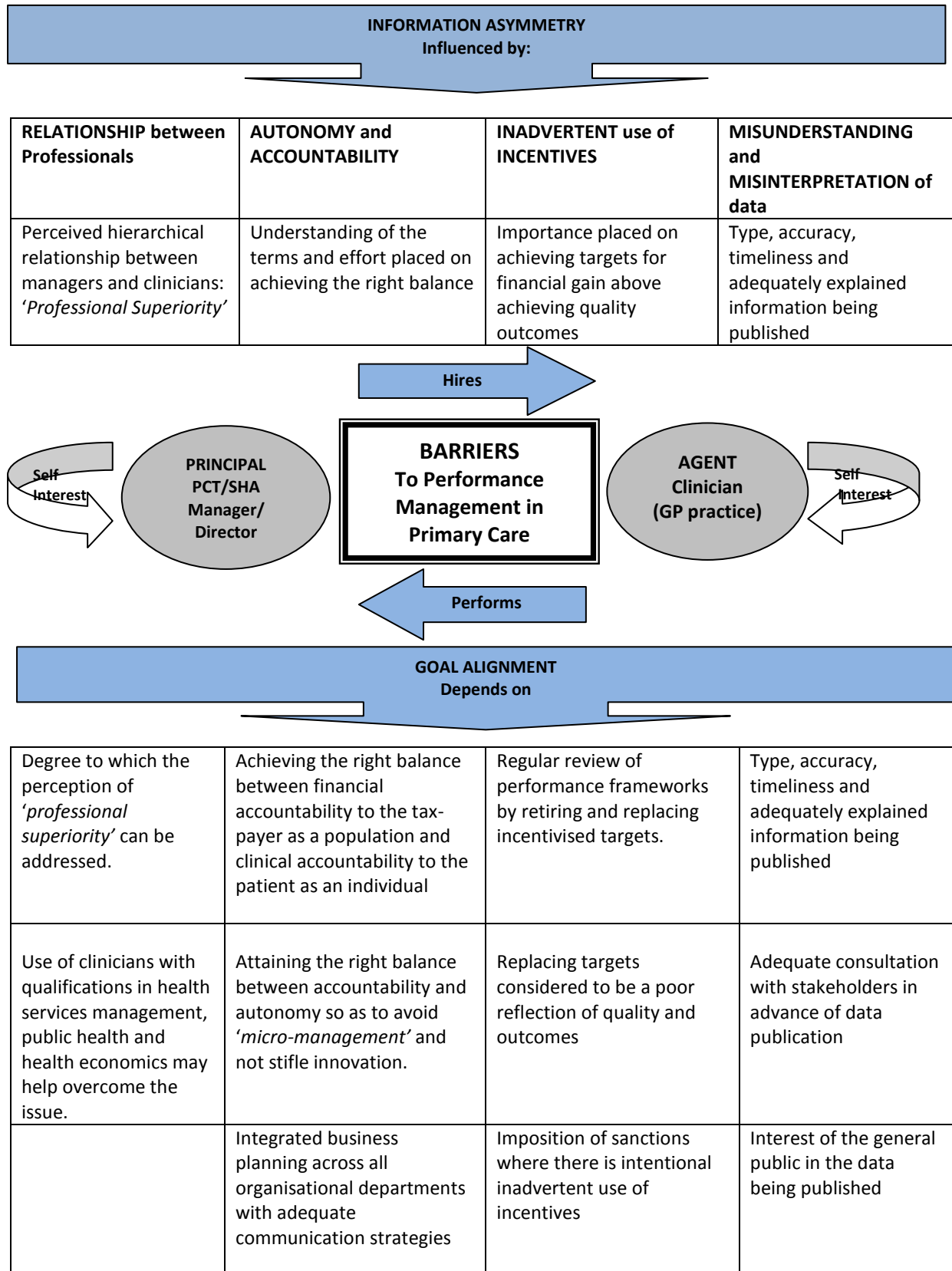
Goal alignment depends on successful strategies to overcome the problem of inadvertent use of incentives and potential unintended consequences that may result. Examples of such behaviour are reported in the academic literature which was also a finding from the empirical research. Interventions that may help overcome this problem include: regular review of performance frameworks; retiring and replacing targets where appropriate; and imposing sanctions where there is intentional inadvertent use of incentives. These interventions will help achieve goal alignment across different professional groups and organisations.

iv. Misunderstanding and Misinterpretation of data

Goal alignment depends on information being: accurate, up to date, responsive and adequately explained prior to public release. Although public release of performance data can be used to improve accountability, there is a risk that data can be misunderstood and/or misinterpreted by the general public. This can lead to unintended consequences. This was reflected in the empirical findings and academic literature. Strategies to overcome this problem and achieve goal alignment include: Use of timely and accurate information that is adequately explained before publication; ensuring adequate consultation with stakeholders in advance of publication; and understanding the level of interest of the general public before publication.

The principal-agent theoretical framework is used to explain the conclusions on barriers to performance management systems in primary care. This is summarised in figure 6.2.

Figure 6.2: Use of principal-agent theory to explain the barriers of performance management in primary care



6.4 Overall Conclusion

The principal-agent theoretical framework can be used to attain a better understanding of performance management in primary care. *Information asymmetry* and *goal alignment* are the two main theoretical assumptions reported in the literature associated with principal-agent theory. These are the main assumptions used in the study to help understand and explain the empirical findings. Complexity of the different professional relationships and inter-dependencies within the NHS influences goal alignment. This research suggests goal alignment is unlikely to be fully achieved. However, the greater the number and extent of achievement of various factors the more likely it is that goal alignment will be achieved.

Firstly, the degree to which a common understanding and clarity of meaning can be reached across all key stakeholders and degree of clear strategic direction and consistent interpretation of objectives at all levels with adequate communication throughout the organisation will affect performance and whether or not goal alignment is achieved. Second, as well as tangible metrics, valued qualitative measures and soft intelligence must as part of a performance management system if goal alignment is to be achieved in primary care. Thirdly, the influence of commissioners over local clinical engagement and local ownership is a crucial element to achieving goal alignment in primary care. A fourth important factor to improving performance and achieving goal alignment in primary care is the availability of incentives and rewards aligned to strategic objectives that cannot lead to inadvertent behaviour and unintended consequences. The fifth and most important issue for achieving goal alignment and improving performance is the level of trust between the principal and agent. This is because the level of trust between principal and agent will impact on many other dimensions that can impact on *information asymmetry* and *goal alignment*. These include: the ability of stakeholders to overcome the divide between managers and clinicians; the level at which principals and agents agree with the overall vision and objectives of the organisation; attaining the right balance between financial and clinical accountability with clinical autonomy and the flexibility to innovate; developing successful strategies to overcome the problem of inadvertent use of incentives and potential resulting unintended consequences that may result; and ensuring information is: accurate, up to date, responsive and adequately explained prior to public release.

6.5 Implications

This section outlines the implications of the study for practice, policy makers and for academic research.

I. Practice

Organisations need to explain to employees at all levels the strategic vision and goals in a way that is clear and succinct that cannot be misinterpreted. There needs to be broader recognition of the importance of qualitative aspects of performance. This will determine how well the organisation performs as a whole with respect to achieving its desired goals.

Organisations need to actively involve stakeholders at the design stage to ensure ownership and engagement. This includes ‘hard to reach’ agents who the principals rely on to deliver organisational objectives. Improved communication techniques across the organisation will increase goal alignment and prioritisation across all stakeholders is important to ensure measures are integrated across the organisation’s functions and through its hierarchy.

Organisations must take care not to develop incentive schemes that can result in unintended consequences and poor outcomes. Careful planning at the design stage will help address this issue. Employees with the appropriate skills, experience and knowledge must form part of the organisational team involved in managing performance. Prior to publication of performance data, organisations should scrutinise the data in advance to ensure there is no opportunity for misinterpretation and that the information is credible and timely with adequate consideration of other factors such as social demographics and case mix.

Although it is unlikely that total agreement will be reached between individuals, departments and organisations, true integrated business planning across all organisational departments with adequate communication strategies will help deliver this and improve performance.

II. Policy Makers

There needs to be clear strategic direction on performance management for primary care which must incorporate qualitative intelligence as well as tangible metrics. Some of the more challenging elements such as training, communication, attitudes and shared vision need to be considered as well as the more straight forward metrics used for detecting variation and

tracking past performance. The QOF needs to be reviewed on a more regular basis and performance indicators need to reflect patient outcomes across the whole population, building in mechanisms to prevent clinicians from chasing incentive targets for patients whom may not benefit or who may suffer adverse consequences. Once a standard has been achieved in one area, these indicators should be temporarily retired and replaced with another set which focus on other important clinical areas. This would reduce the number of indicators at any one time to a more manageable number and enable greater focus on clinical care pathways and/or individualised health management plans. It would also provide an opportunity for clinicians to focus on aspects of care that may have been neglected or had a lower priority due to the lack of associated financial rewards. Although this has begun to happen with a review of the QOF and local enhanced services, this research suggests a need for this to happen more quickly than the planned national programme.

Performance has been shown to improve even without use of incentives. Inclusion of mandatory performance measures in the contract may achieve outcomes without associated costs. This may need to be considered a priority in the current economic environment. A strategy for addressing this could be to develop a system that condenses all aspects of performance and enhanced services into a single programme. Performance measures should form part of clinical care pathways and professional re-validation.

Reducing the number of targets unrelated to outcomes will encourage clinicians to concentrate on those elements of care which are valued most by clinicians. This would result in a greater likelihood of achieving desired goals that will ultimately benefit patients. This proposal would require a review of how practices are remunerated if QOF targets are reduced and enhanced services re-designed into a single system.

As clinicians take a more active role in commissioning with devolved budgets there needs to be greater strategic direction from policy makers to local organisations. The academic literature and empirical findings have highlighted the need for adequate skill mix for successful primary care-led commissioning. CCGs are small, clinically led organisations with limited capacity. Opportunities need to be made available for clinicians to develop their skills and techniques in health services management to include training in: public health, contracting, organisational development and health economics. This will help achieve goal alignment.

III. Academic Research

Suggestions on recommendations for future academic research based on the outcomes of this study are listed and grouped below:

a. Strategic/Policy Makers:

Given the dearth in literature on use of sanctions in the public sector, *use of principal-agent theory to explore use of sanctions in the public sector* would provide an important academic contribution. *How goal alignment could be achieved without the use of financial rewards* would provide a useful contribution given the current financial pressures to make efficiency savings. A common theme emerging from the empirical finding was that of developing meaningful indicators with recommendations of incorporating into clinical care pathways. A strategic application of the principal-agent framework would be to consider performance management through the development of outcome measures relating to clinical care pathways and assessing whether this achieves goal alignment without the use of financial incentives.

b. Inter-Organisational:

Use of principal-agent theory to understand how performance can be improved and desired goals achieved where the clinicians or CCGs represents the principal and future commissioning support units (CSUs) represent the agent delivering commissioning services to CCGs would be a new contribution. This follows recent organisational change and the setting up of various commissioning support units across the country.

Using principal-agent theory to explore the relationship between CCGs (as principals) and Foundation Trusts (as agents) with respect to the theoretical assumptions of *information asymmetry* and *goal alignment* would be another study worth exploring. This follows acute trusts being given foundation status and financial accountability for managing their budgets.

c. Intra-organisational (CCG/General Practice):

Use of principal-agent theory within individual GP practices where the principal and agent relationship is represented by the GP as the principal and practice nurse as the agent would be

an interesting study where practice nurses are delivering outcomes through managing chronic disease management clinics on behalf of the GPs who realise the benefits in terms of financial rewards. This concept emerged from findings in this study.

Evidence on successful peer review and subsequent challenge on performance in primary care is sparse. A study to explore the impact and potential barriers to addressing performance and variation through peer review would make a significant contribution. Principal-agent theory would be used in this scenario where both principals and agents are clinicians and it is their respective responsibilities that differentiates their role in the principal-agent relationship.

d. Individual (Clinician to Patient):

Use of the principal-agent theory where the patient represents the principal and clinician the agent would provide a useful research study especially as there is limited research in this field involving patients. The study would make a significant contribution to the patient choice agenda.

6.6 Future Implications and Challenges

Through studying the academic literature on former models and features of primary care-led commissioning and more recent publications from policy makers, the principal-agent theoretical framework can be used to understand future implications and challenges that lie ahead for Clinical Commissioning Groups (CCGs):

Engaging all member practices will be essential if goal alignment across CCGs is to be achieved. As a membership organisation a challenge going forwards for CCGs will be to engage all practices in the commissioning process and to avoid some of the difficulties encountered in the past such as ‘free-riding’ and the reliance on a small minority of entrepreneurial GPs who have been at the heart of primary care-led commissioning.

The problem of *information asymmetry* could become an even greater challenge for CCGs and transparency will become paramount. Successful management of the conflict of interest

between agents both commissioning and providing clinical services will be essential if organisations are to avoid inappropriate behaviour and unintended consequences.

Desired goals will only be achieved if CCGs have effective management and information support. Population needs assessment; service specifications; development and redesign; priority setting; resource allocation; contract negotiation and service monitoring are all features that require adequate management and support in order to be successful in achieving desired organisational goals.

Achievement of desired goals could be prevented if resources are not available to invest in services that enable the organisation to achieve those goals. Implementation of the NHS reforms will put pressure on CCGs at a time when financial pressures on the NHS are increasing. CCGs will need to develop robust efficiency plans to generate savings that can be re-invested into services and enable the organisation to achieve its desired objectives.

Goal alignment will be dependent on CCGs developing successful peer review mechanisms for challenging variation and performance with colleagues.

6.7 Limitations

There are different variants of the principal-agent model, each focussing on different aspects of contract design, compensatory arrangements and supervisory mechanisms. This study concentrates on the simplest model looking at the relationship between different professional groups and organisations that encompass areas which the researcher desired to explore. It serves only as a framework to generate further discussion rather than examining the analytical and economic consequences of the model.

A change in government resulted in national and local organisational change. A consequence of this was difficulty engaging with participants from a second PCT that formed part of the original inclusion criteria. This was considered a limitation at the time. However, as developments progressed and future commissioning arrangements were clarified, it became apparent that it would be of greater benefit to involve a broader spectrum of clinicians from a single primary care organisation rather than purposive sampling on a wider footprint.

Limitations relating to the methodology along with techniques used to minimise limitations associated with the research are outlined in section 3.5.6

6.8 Reflections

Reflections are divided into two sections: reflections on the research study and personal reflections of the author.

I. Reflections on the Study

Including practice nurses and healthcare assistants in the study would have provided richer data on the internal dynamics within a practice which could ultimately impact on overall organisational performance.

Following publication of the new NHS reforms, organisational change resulted in several participants, particularly managers and directors leaving the primary care organisation through retirement, voluntary redundancy or to take alternative roles. Findings from those participants may be considered less pertinent for the newly formed structures. However, this concern became less relevant as it became apparent that performance management would continue to be important, if not more important in the newly formed CCGs with respect to accountability, responsibility and safety.

Being part of the participating organisation enabled ready access to managers and directors within the PCT through having internal knowledge of the system for arranging appointments. Having a history of working with local GPs and managers over a number of years improved credibility and trust which helped facilitate access and engagement of participants.

Attendance of local performance meetings with access to minutes and other information helped with data triangulation and improve validity of the study. On balance, the advantages associated with the researcher being part of the organisation outweigh the disadvantages from potential bias.

II. Personal Reflections

A challenge of undertaking a PhD part time over a long timescales is to ensure the study remains as relevant at the end as it was at the beginning. This is particularly important in research that involves complex organisations such as the NHS, where structures and systems

can change quickly in relatively short timescales. Since this study commenced, the English NHS has undergone significant organisational change across all levels. Despite this, the findings are as if not more important at the end of the study given the increased accountability and greater need for transparency with CCGs compared with PCTs.

The study has enabled the researcher to take a more analytical and critical approach to the world. It has also resulted in a broader understanding of the strategic concepts in the English NHS and how these can be readily transferred to different organisations and different sectors. National policies, letters and publications need to be comprehensive and robust with an evidence base and clear strategic direction.

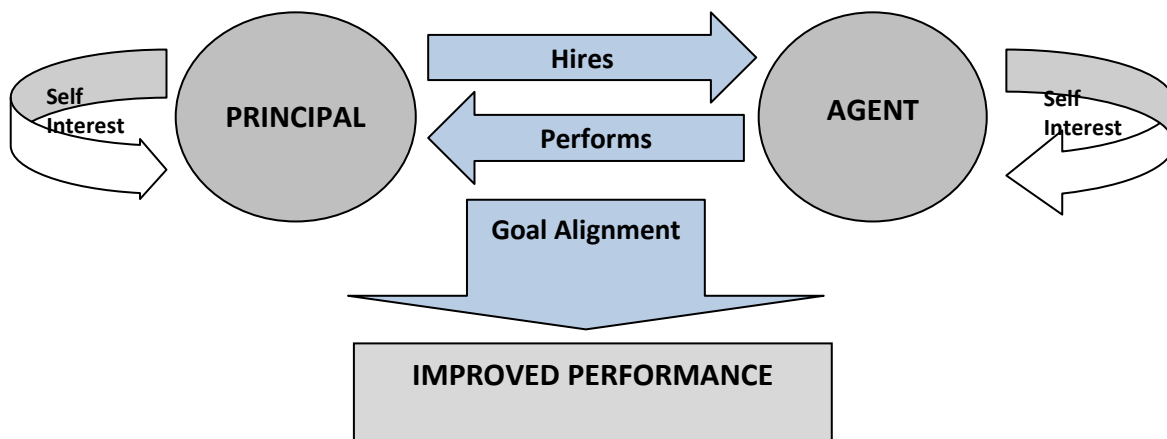
III. Reflections on Principal-Agent Theory

An adapted model of principal-agent theory when applied to health care is summarised diagrammatically in figure 6.3. The dimensions in bold have been identified as being the most important from this research, which if achieved, will aid in achieving the remaining dimensions.

Figure 6.3 Concept of Agency Theory when Applied to Primary Health Care

PERFORMANCE MANAGEMENT Is influenced by:		
Understanding Performance Management	Performance Management Systems	Barriers to Performance Management
<p>Common understanding and consistent interpretation of objectives at all levels throughout the organisation</p> <p>Clear strategic direction from policy makers</p>	<p>Qualitative measures and soft intelligence as well as tangible metrics</p> <p>Local clinical engagement and ownership</p> <p>Adequate communication channels</p> <p>Agreeing performance indicators with policy makers</p> <p>Availability of incentives and rewards</p> <p>Information being: accurate, up to date, responsive and adequately explained prior to public release.</p>	<p>Level of trust between principal and agent</p> <p>Ability to overcome the problem of information asymmetry between principal and agent</p> <p>Ability to overcome the divide between managers and clinicians</p> <p>Getting the correct balance between autonomy and flexibility to innovate with accountability</p> <p>Overcome the problem of inadvertent use of incentives and potential unintended consequences</p>

Goal Alignment and Improved Performance depends on achievement of the above factors



In primary care general practitioners are independent contractors, working to a nationally negotiated contract that is performance managed locally. This results in a complex map of information asymmetry and potentially conflicting goals. The principal-agent theoretical framework can be adapted to be more useful in the context of the NHS. The framework needs to capture the more altruistic dimensions that affect performance and goal alignment other than information asymmetry in such a complex system. Common understanding, clear strategic direction and adequate communication across principals and agents are dimensions that need to be incorporated into the framework to achieve goal alignment. Qualitative measures and soft intelligence need to be included as dimensions to achieve goal alignment as well as local engagement and ownership between principal and agent. Although incentives and rewards are considered within principal-agent theory as a mechanism to achieve goal alignment, an additional dimension needs to be embedded which is that of ensuring incentives and rewards are aligned to strategic objectives and that they cannot result in inadvertent behaviour and unintended consequences. The most important dimension that needs to be captured within the theoretical framework is *trust* between the principal and agent. This is because the level of trust between principal and agent will impact on many other dimensions that can impact on *information asymmetry* and *goal alignment*. These include: the ability of stakeholders to overcome the divide between managers and clinicians; the level at which principals and agents agree with the overall vision and objectives; attaining the right balance between financial accountability and clinical autonomy and ensuring information is: accurate, up to date, responsive and adequately explained prior to publication.

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Appendices

Appendix 1:

INTERVIEW SCHEDULE

A. General questions on performance

1. Do you feel performance management is important? And Why?
2. What is your understanding of the terms performance management and performance measurement? How would you describe the difference between the terms?
3. In general, how do you feel the terms are applied and utilised in the NHS?
4. "Performance measurement provides no answers but inspires us to ask the right questions." From your experience do you agree/disagree with this statement?
5. How important do you feel it is to link performance measurement to organisational vision and objectives? And why?

B. Performance and Inter-organisational relationships in primary care

1. Can you describe the relationship between managers and clinicians in terms of performance management and monitoring of contractual obligations in primary care?
2. Would you consider this to be a hierarchical relationship?
3. Do you feel that autonomy and accountability go hand in hand? NB. Need to grant autonomy to professionals performing complex public tasks

C. Performance management and the NHS

1. Do you feel that the current performance indicators used in the NHS are the most appropriate measures for assessing performance? Please explain.
2. a. What types of indicators/information do you feel ought to be used to assess performance in primary care?
b. How do you think these should or could these be used?
3. a. Who do you feel is best placed to assess performance in primary care?
b. And how?
c. At what level?
4. To what extent do you feel that managers and clinicians are fully engaged in performance management?
5. In your opinion what would be the most effective measures to engage all clinicians with both performance management and delivery of organisational objectives.
6. How important do you feel it is to involve other stakeholders in performance management eg. Patients?

D. Use of Performance Data

1. As a clinician/manager/director can you provide an example of where you have used performance data to promote change?
2. a. I'm now going to share an example of some performance data relating to productivity and efficiency performance indicators. Are you familiar with the DH productivity performance indicator framework?
 - b. Has this data ever been shared with you?
 - c. Are you aware of the practice's/ organisation's position in terms of the BCBV productivity performance indicators?
[Assess awareness of comparators in terms of: GP practices within PCT, PCT within SHA, and SHA at national level. Prompt: Share anonymised data to help explain].
3. Are you aware of the productivity opportunity costs attached to each of the BCBV productivity performance indicators?
4. Why do you think that there is such a wide variance across both practices and organisations in terms of the productivity performance outcomes? Please explain.
5. As a manager/ clinician/ director how important would you consider the productivity performance indicators to be? *[Nb. Attain both perspectives]* On a scale of 1 to 5 with 1 being not important and 5 being very important. Please explain your justification for the score.
6. In your opinion does the way data is presented affect the way it is used? Eg. Graphs/tables

E. Use of data to improve performance – sanctions and rewards

1. Do you feel that performance indicators are a good motivational device for action and change?
2. How do you feel the data could be used more effectively? For example: If your practice/ organisation was highlighted as having high levels of prescribing for expensive statins/ high levels of emergency admissions/ or high levels of outpatient referrals compared with similar practices/ population groups – what drivers (if any) would encourage you/ your colleagues to use the data to try to improve?
3. Do you think that service or organisational objectives could be better aligned through incorporating key performance measures such as these into the contract?
4. Do you feel that a move towards GP commissioning will encourage GPs/practices to use/ scrutinise this data more closely?
5. In your opinion, what do you feel are the key elements of a successful incentive programme?
6. Do you feel that incentives should be awarded based on specific targets or improvement?

F. Public Release of Data

1. Do you feel that reputational programmes such as public release of performance data would/should be an incentive for improvement?

Thank the participant for their time and participation and explain again what will happen with the data gathered.

Appendix 2:

POSTGRADUATE RESEARCH PARTICIPANT INFORMATION SHEET

You are being invited to take part in a research study as part of a PhD research study.

Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

Who will conduct the research?

Lisa Rogan; PhD student; Manchester Business School, Booth Street West, Manchester.

Title of the Research

The Role of Performance Information in the Management of Primary Care

What is the aim of the research?

The aim of the study is to develop an understanding of how primary care performance data is used by managers and clinicians in the NHS. The NHS performance framework used in the study will focus on productivity indicators.

Key objectives include:

- To develop an understanding of the inter-organisational relationships between clinicians and managers in relation to primary care performance.
- To understand the awareness of and prioritisation given to performance indicators.
- To understand the reasons for the variance across both practices and PCTs.
- To understand potential barriers for improvement.
- To identify ways in which such barriers could be overcome.

It is intended that the study will provide a better understanding of how performance data is used on a number of levels within NHS organisations from a provider, commissioning and regulatory perspective in the context of productivity outcomes. It is intended to explore ways in which potential barriers can be overcome by better aligning objectives across all organisations.

Why have I been chosen?

PCTs have been selected based on similar socio-economic status. NHS managers have been selected based on their knowledge, expertise and leadership in performance management with a focus on productivity performance in primary care. Practices have been selected based on the varied outcomes across different productivity measures, practice size and infrastructure and practice demographics.

What would I be asked to do if I took part?

You will be invited to take part in a formal, semi-structured interview which will be recorded and transcribed. The recording can be stopped at any time and something deleted if the participant is unhappy with something they have said.

What happens to the data collected?

All information provided in the interview will be collated and analysed. No individual or responses will be identified. Anonymised quotes will be used only if consent is given. A summary report of the analysis will form part of the research study.

How is confidentiality maintained?

All information will be anonymised and unidentifiable. All material will be securely stored in lockable facilities and electronic data will be anonymised and used only with encrypted software.

What happens if I do not want to take part or if I change my mind?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason and without detriment to yourself.

What is the duration of the research?

The interview is likely to take no more than 60 minutes.

Where will the research be conducted?

The research will be conducted at a site of your choice.

Will the outcomes of the research be published?

A summary of the final thesis will be shared with the participating organisations. It is possible that outcomes of the research may be published.

What approval has been given?

The study requires research ethics approval. I have received ethics approval from The North West 11 Research Ethics Committee to proceed with the study. Research governance approval has been received from NHS East Lancashire, NHS Central Lancashire and NHS North West.

What if there is a problem?

If you have a concern about any aspect of this study, please ask to speak to the researcher who will do her best to address the issue. If you would prefer not to discuss your concern with the researcher or you wish to make a complaint, you can do this through the University Research Office by calling 0161 2758093 or 0161 2757583 or by email to researchgovernance@manchester.ac.uk. The NHS Complaints Procedure is also available to you. Details can be obtained from the hospital Patient Advice and Liaison Service (PALS).

Contact for further information:

Lisa Rogan, NHS East Lancashire on 07738035100 or Lisa.Rogan@postgrad.mbs.ac.uk; lisa.rogan@eastlancspct.nhs.uk

Appendix 3:

CONSENT FORM

Faculty of Humanities

Title of Project: The Role of Performance Information in the Management of Primary Care.

Name of Researcher: LISA ROGAN

School: Manchester Business School

Please read this and if you are happy to proceed, sign below.

The researcher has given me my own copy of the information sheet which I have read and understood. The information sheet explains the nature of the research and what I would be asked to do as a participant. I understand that the research is for a student PhD project and that the confidentiality of the information I provide will be safeguarded unless subject to any legal requirements. She has discussed the contents of the information sheet with me and given me the opportunity to ask questions about it.

Please read the following questions and initial boxes accordingly.

1. I confirm that I have read and understand the information sheet dated: 4th March 2010 (version 4) for the above study. I have had the opportunity to consider the information, and ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected.

3. I understand that the relevant sections of data collected during the study, may be looked at by individuals from NHS East Lancashire, NHS Central Lancashire, NHS North West and GP practice participants where it is relevant to my taking part in this research. I give permission for these organisations to have access to the anonymised data.

4. I consent to the use of direct quotes in such a way as not to identify participants.

5. I agree to the audio recording of the interviews.

6. I agree to take part as a participant in this research.

Name of Participant

Date

Signature

.....

.....

.....

Name of Researcher

Date

Signature

.....

.....

.....

Appendix 4: Managing Variation in Surgical Thresholds – Q4 2008-9 for NW PCTs

2.1 Clinical productivity - PCTs

Page 1 of 3
Q4 2008/9



Managing variation in surgical thresholds

Certain elective surgical procedures are carried out much more frequently in some PCT areas than others. In some cases the operation is performed in situations where it has little or no benefit for the patient.

Rates of operations vary widely between different areas. Here we look at five procedures where there is evidence they are often overused and carried out on patients who derive little or no benefit as a result. An expected (average) rate of these five operations is calculated for each PCT based on the age, sex and social deprivation of the population. This expected rate is then compared to the actual rate and expressed as a ratio. A figure of 110 indicates a 10% higher level of activity than expected, whereas 90 indicates activity that is 10% lower than expected.

The five procedures that are included in this indicator are tonsillectomy, dilatation and curettage, hysterectomy, lower back surgery and myringotomy (grommets).

There is a wide variability between PCTs in the standardised admission ratios for these procedures compared to the expected ratio - up to 200%. ¹

If all trusts reduced their standardised admissions ratio so that it did not exceed 125, that is more than 25% above expectation, each PCT could avoid up to 400 operations a year for tonsillectomy, dilatation and curettage, hysterectomy, lower back surgery and myringotomy.

Research shows that tonsillectomy may be of modest benefit for children who experience severe recurrent bouts of tonsillitis, but this benefit may be outweighed by the risks associated with surgery. The risk-benefit ratio is less favourable for children who experience less severe tonsillitis. ²

Dilatation and curettage has a useful role to play in the investigation of menorrhagia but there is evidence that it may be less effective as a treatment. ³

Hysterectomy is an essential procedure in some instances, but there are conditions, such as menorrhagia and fibroids, where its effectiveness is less clear cut and alternative treatments may be preferred. ⁴

Similarly, there is evidence that many patients who receive lower back surgery derive little or no benefit. Guidelines suggest that certain symptoms, such as the presence or absence of associated leg pain can indicate whether or not surgery is likely to be beneficial. ⁵

Insertion of grommets is of most benefit to children with an extended period of substantial hearing impairment, with persistence and severity established by watchful waiting. This is because the clinical benefits of grommets become less significant over the longer term and their insertion is not without risk. ^{6, 7}

Key steps to managing variation in surgical thresholds:

- Analyse standardised admissions rates for these five areas and identifying which are higher than expected.
- Establish protocols for treating patients with conditions where surgical variation is very high. This will ensure that patients likely to benefit from these surgical procedures are operated upon, and those that are not are treated in more appropriate ways.
- Identify which individual GP practices have high rates of referrals that result in these procedures.
- Use practice-based commissioning to incentivise GPs to manage patients with these five conditions in the most appropriate manner. Ideally a local system to monitor GPs admission rates for these conditions should be set up, and regular feedback on performance given to practices to aid their improvement.
- Continue to monitor the rates of surgery for these procedures to ensure improvements are occurring.

2.1 Clinical productivity

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Q4 2008/9



Relative level of surgery for five procedures

SHA: North West

National position		Relative level of surgery	Productivity opportunity	Change from last period
4	Blackburn with Darwen PCT	47.30	£89,000	▲ -10.08
16	Ashton, Leigh and Wigan PCT	63.63	£232,000	▲ -11.22
19	Trafford PCT	67.59	£206,000	▲ -80.48
28	Knowsley PCT	75.70	£380,000	▲ -7.84
42	Bolton PCT	81.10	£524,000	▼ +42.45
NATIONAL TOP QUARTILE: Trusts above this line performed in the top 25% [81.71]				
52	Salford PCT	85.60	£721,000	▼ +5.12
53	East Lancashire Teaching PCT	85.93	£736,000	▼ +13.46
68	Stockport PCT	90.36	£493,000	▲ -12.53
NATIONAL AVERAGE Grey shading indicates poorer than average performance [94.25]				
83	Liverpool PCT	96.01	£528,000	▲ -8.22
86	Cumbria PCT	97.12	£1,383,000	▲ -1.98
91	Central and Eastern Cheshire PCT	97.90	£798,000	▼ +11.67
99	Manchester PCT	100.05	£687,000	▼ +3.93
100	Sefton PCT	100.33	£537,000	▼ +11.30
104	Bury PCT	101.50	£438,000	▼ +2.59
107	Oldham PCT	103.97	£592,000	▼ +2.88
111	North Lancashire PCT	106.39	£1,975,000	▼ +7.00
113	Blackpool PCT	106.81	£393,000	▼ +16.21
119	Western Cheshire PCT	110.18	£317,000	▲ -18.57
121	Wirral PCT	110.73	£590,000	▲ -22.87
142	Central Lancashire PCT	125.02	£1,178,000	▼ +26.16
146	Heywood, Middleton and Rochdale PCT	134.99	£714,000	▼ +8.65
149	Halton and St. Helens PCT	142.85	£853,000	▼ +7.50
150	Tameside and Glossop PCT	144.46	£1,149,000	▼ +17.48
151	Warrington PCT	150.82	£728,000	▼ +33.62

16,241,000

The change from last period gives the absolute value change in the indicator compared to the previous quarter. A green arrow indicates an improvement and a red arrow indicates a deterioration in performance. The changes reflect both real changes and also changes in data quality, especially in the case of larger changes. Where a trust provided invalid data in the last quarter, or it is a new organisation, no change is shown.

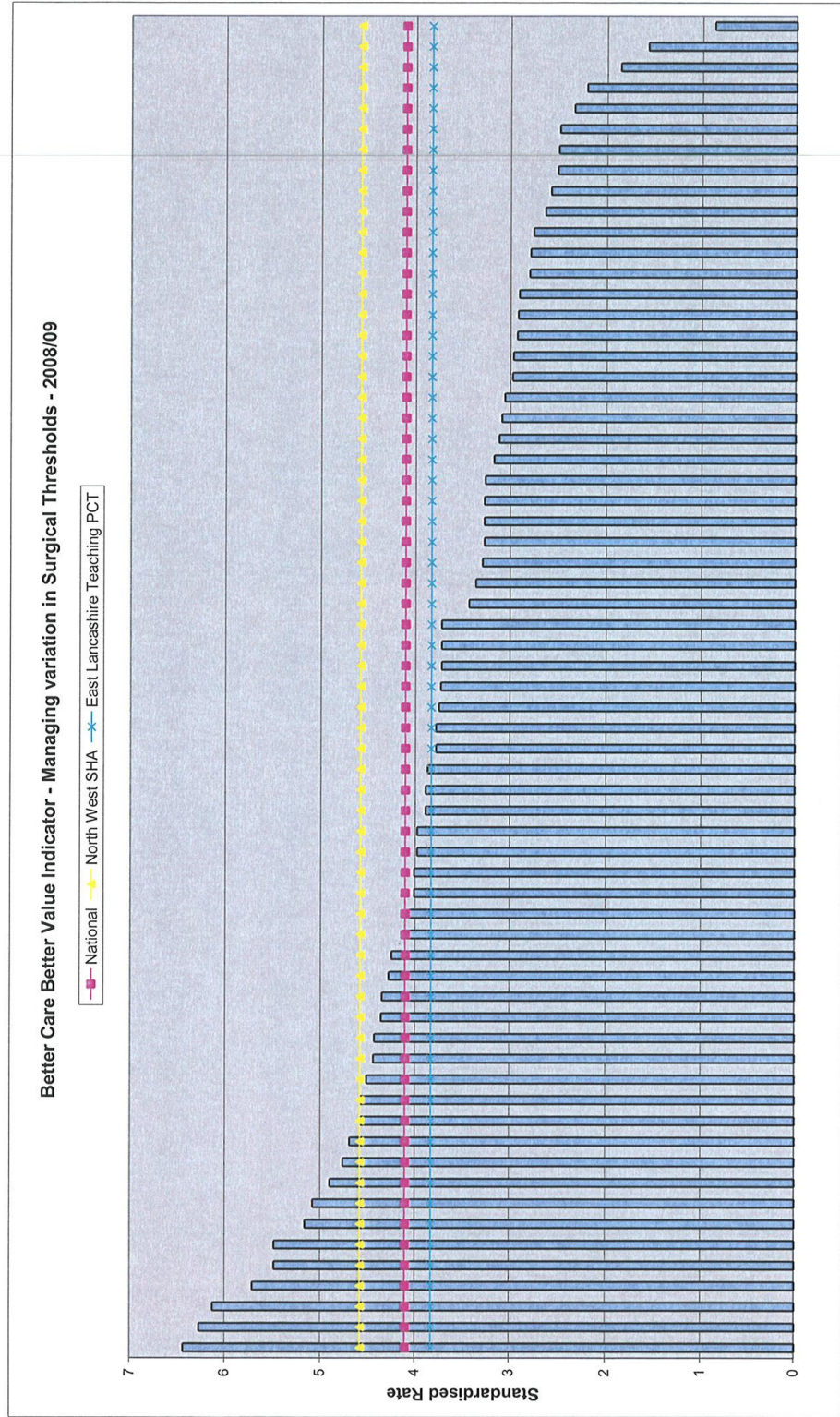
2.1 Relative level of surgery: This indicator shows whether the rate of operations for the five procedures is higher or lower than expected for the PCT population. The indicator is the ratio of the number of procedures that took place to the expected number, so each operation is weighted according to the relative level of activity. A figure of 100 indicates that the rate of surgery is exactly as expected. A figure of 120 means a rate 20% higher than expected. There is no correct rate of surgery, but in general high or low numbers may suggest management of surgical thresholds could be improved. The data is for the quarter shown above.

Appendix 5: Variation in Surgical Thresholds across General Practices in East Lancashire 2008-09

Managing variation in Surgical Thresholds Data Source: <https://nww.nhscomparators.nhs.uk>

A Better Value Better Care comparator. See www.productivity.nhs.uk indicator for "Managing variation in surgical thresholds". The purpose is to enable comparison of the rate of operations for a basket of five procedures with evidence of overuse. High values could indicate that procedures are being carried out inappropriately. Note the values for this comparator will be different to the BCBV ones as cut off points for data are different and the BCBV comparators are adjusted for demographic factors other than age (i.e. need).

The chart below gives the rates for each practice within NHS East Lancashire PCT for 2008/09.





Managing variation in outpatient referrals

Some outpatient appointments could be eliminated by handling them in other ways. Many patients could be treated effectively and more cheaply outside hospital altogether, and follow-up of some could be conducted over the telephone.

This indicator measures the rates of outpatient appointments within a PCT relative to the expected rates. An expected rate is calculated for each specialty and for each combination of age, sex and need. A PCT that referred as expected would have a ratio of 100, whereas one who had a 10% higher rate of referrals would have a ratio of 110.

Standardised ratios vary widely between trusts and between specialties. This variation may reflect in part poor recording of outpatient appointments and organisations should check the quality of the data they provide on this issue. When all specialties are considered, rates of appointments can vary from less than 50% to over 150% of the expected rate.

The Department of Health has identified the opportunities for outpatient work to be moved out of the hospital into the community. It has identified six specialties in which most outpatient care could be provided outside of hospital. These are: dermatology, ENT, general surgery, orthopaedics, urology and gynaecology. The DH is currently working with the Royal Colleges to define clinically safe pathways for these specialties to ensure that the right care is provided in the right environment.

Some trusts have a high number of follow-up outpatient appointments relative to new referrals. There is a more than threefold variation in the ratio of new appointments to follow-up appointments in all specialties between trusts.¹ In dermatology, there is an almost six-fold variation in the ratio of new to follow-up appointments between trusts.

Key steps to a more efficient outpatient service:

- PCTs should analyse their outpatient referral rates to ensure that they are in line with expected levels.
- PCTs should introduce systems to monitor GP referral rates and provide feedback to them. Practice-based commissioning can be used to incentivise GPs to reduce referral levels where they are overly high.
- When awarding contracts to hospital providers, set an appropriate ratio of new to follow-up appointments within the contract.
- Follow up patients over the telephone where possible, reserving follow-up appointments only for those patients who really require them.
- Increase the number of GPs with a special interest, so that patients can be referred to them rather than hospital outpatients. In many countries, virtually no outpatient appointments are carried out in hospitals. Providing care outside of the hospital is more cost effective and often more convenient for patients.
- Develop the skills of nurses and allied health professionals, so that they can take on work from GPs, such as providing first contact care and tailored services for patients with long-term illnesses, such as diabetes and chronic lung disease.

Endnotes

¹ NHS Institute for Innovation and Improvement. Delivering Quality and Value. Focus on: Productivity and Efficiency. April

Further information

Department of Health. Our Health, Our Care, Our Say: a new direction for community services. January 2006.

www.dh.gov.uk/assetRoot/04/12/74/59/04127459.pdf

Department of Health. Practitioners with special interests: Bringing services closer to patients

www.dh.gov.uk/assetRoot/04/07/23/69/04072369.pdf

Department of Health. Implementing a scheme for general practitioners with special interests

www.dh.gov.uk/assetRoot/04/05/98/61/04059861.pdf

Department of Health. Guidelines for the appointment of general practitioners with special interests with the role of service development: generic model

www.dh.gov.uk/assetRoot/04/05/98/62/04059862.pdf

British Medical Association. Priorities for Health Background Briefing, December 2002.

www.bma.org.uk/ap.nsf/Content/briefingpublicinvolvement

For frequently asked questions go to:

www.productivity.nhs.uk/faq

Relative level of outpatient appointments

The ratio shows the level of first outpatient appointments compared to the level that would be expected given national rates and adjusting for the age, sex and need of your population. A figure of 100 means that the performance is in line with annual national average rates of appointment. The average rate for each quarter fluctuates around this figure with seasonal variations. A figure of 110 indicates a 10% higher level of referrals than expected. In general, high or low figures may suggest poor management of thresholds for referral.

The data is for the quarter shown at the top of the page.

For a full definition of how this is calculated go to:

www.productivity.nhs.uk/definitions

Productivity opportunity

This is calculated by taking the number of appointments that would have been avoided if referral rates were in line with the quartile of PCTs with the lowest standardised rate of referrals and multiplying this by the average PbR tariff for each trust. Savings are expressed as annualised figures by multiplying by four the savings of the quarter measured. This is the total figure, not a figure per unit of population, larger PCTs will tend to show a larger opportunity.

For a full definition of how this is calculated go to:

www.productivity.nhs.uk/definitions

The following tables show relative levels of outpatient appointments.

For further information go to www.institute.nhs.uk

For queries about your data, please email productivity@institute.nhs.uk

Relative level of outpatient appointments

SHA: North West			
National position	Relative level of outpatient appointments	Productivity opportunity	Change from last period
20	Blackpool PCT	95.32	£399,000 ▼ +28.34
30	Stockport PCT	98.46	£875,000 ▼ +28.88
NATIONAL TOP QUARTILE: Trusts above this line performed in the top 25% [98.50]			
33	Warrington PCT	99.17	£1,003,000 ▼ +33.78
47	Wirral PCT	104.94	£1,103,000 ▼ +32.74
66	Blackburn with Darwen PCT	109.03	£675,000 ▼ +26.46
NATIONAL AVERAGE Grey shading indicates poorer than average performance [109.20]			
72	North Lancashire PCT	111.49	£896,000 ▼ +28.43
75	Cumbria PCT	111.90	£928,000 ▼ +26.91
83	Oldham PCT	115.34	£726,000 ▼ +23.92
85	Central Lancashire PCT	116.39	£1,282,000 ▼ +56.22
87	Western Cheshire PCT	116.83	£383,000 ▼ +35.86
94	East Lancashire Teaching PCT	118.26	£2,830,000 ▼ +33.39
96	Central and Eastern Cheshire PCT	118.80	£588,000 ▼ +38.87
100	Heywood, Middleton and Rochdale PCT	120.90	£577,000 ▼ +29.86
105	Bury PCT	122.23	£352,000 ▼ +34.58
109	Halton and St. Helens PCT	123.77	£707,000 ▼ +43.59
113	Bolton PCT	125.48	£1,276,000 ▼ +74.65
116	Salford PCT	128.27	£328,000 ▼ +42.18
117	Ashton, Leigh and Wigan PCT	128.44	£1,128,000 ▼ +47.08
122	Manchester PCT	129.64	£1,567,000 ▼ +39.07
129	Trafford PCT	133.82	£451,000 ▼ +52.39
143	Sefton PCT	149.24	£1,093,000 ▼ +84.53
144	Tameside and Glossop PCT	151.99	£1,492,000 ▼ +19.35
145	Knowsley PCT	158.76	£561,000 ▼ +80.29
148	Liverpool PCT	173.86	£2,623,000

22 174 01 000

The change from last period gives the absolute value change in the indicator compared to the previous quarter. A green arrow indicates an improvement and a red arrow indicates a deterioration in performance. The changes reflect both real changes and also changes in data quality, especially in the case of larger changes. Where a trust provided invalid data in the last quarter, or it is a new organisation, no change is shown.

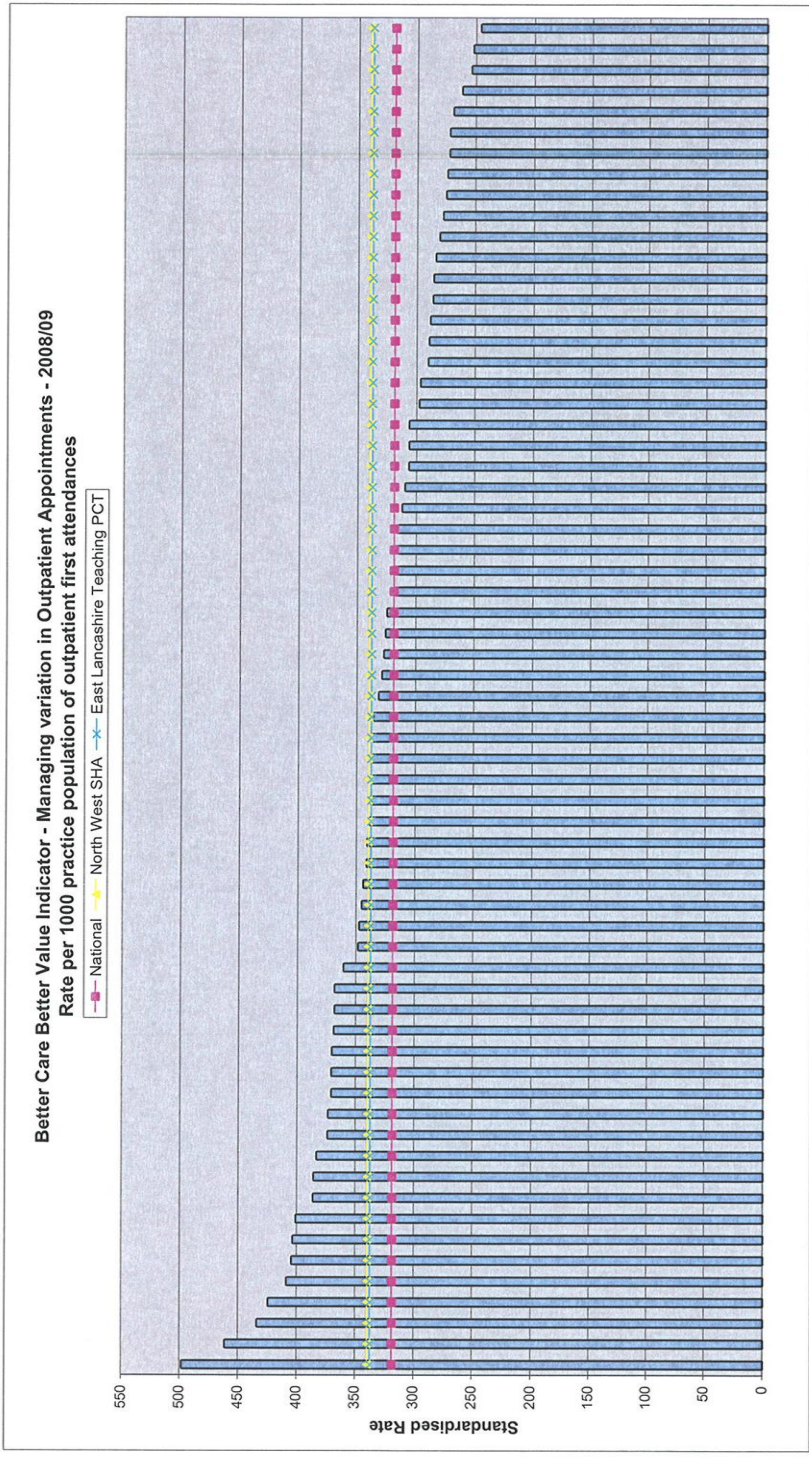
2.4 Managing variation in outpatient referrals: The ratio shows the level of first outpatient appointments compared to the level that would be expected given national rates and adjusting for the age, sex and need of your population. A figure of 100 means that the performance is in line with annual national average rates of appointment. The average rate for each quarter fluctuates around this figure with seasonal variations. A figure of 110 indicates a 10% higher level of referrals than expected. In general, high or low figures may suggest poor management of thresholds for referral.

Appendix 7: Variation in Outpatient Referrals across General Practices in East Lancashire 2008-09

2.4 Managing variation in Outpatient Appointments
 Data Source: <https://www.nhscomparators.nhs.uk>

The rate per 1000 practice population of outpatient first attendances

The chart below shows the rates for GP Practices within NHS East Lancashire, for 2008/09.





Managing variation in emergency admissions

Many patients present at A&E with problems which may have been avoidable if they had been managed better in the community. This is distressing for patients, but also wastes valuable A&E time and NHS money. Nineteen conditions have been identified where this is particularly likely.

This is a ratio of actual emergency admissions to the expected level for these conditions, standardised by age, sex and population. Nineteen such 'Ambulatory Care Sensitive' conditions have been identified, and these include COPD, asthma, diabetes with complications and hypertension. See below (p2) for full list.

In 2004/5, the NHS spent £1.3 billion on admitting people with these conditions to hospital. A 30% reduction in this total would save the NHS £437 million.¹

At PCT level, total hospital costs for treating these patients range from 6% to 13.2%. If the PCTs in the highest quartile reduced such hospital admissions by 25% the NHS would save £94 million.¹ The proportion of patients presenting at A&E who are admitted to hospital varies from around 10% to over 30% between hospital trusts.

Key steps to improving case management and reducing emergency admissions:

- Identify which conditions are leading to emergency admissions. PCTs should identify which conditions account for a disproportionate level of hospital admissions and thus use of resources in their area.
- Inform practices if their patients are presenting at A&E frequently. Systems should be put in place at PCT level to feed back to GPs which of their patients are presenting at A&E as a result of one of these 19 conditions, so that their care can be reviewed and improved. There are computer-based tools that enable such patients to be easily identified.^{1,2}

- Encourage practices to review the care of these patients. Practice-based commissioning can be used to incentivise practices to improve their management of potential high-intensity users in order to reduce strain on A&E.
- Support practices in the management of these patients. Other services, such as rapid access clinics, in-reach and out-reach teams, intermediate care and other community services, should be aligned to support GP practices' management of these patients in order to avoid excessive emergency admissions.
- Work with local trusts to improve A&E assessment procedures. Hospital admission should only be necessary for A&E patients where there are clinical reasons for assessments or treatments taking longer than four hours.

Endnotes

¹ Dr Foster Intelligence. High-impact User Manager (HUM) Tool <http://www.drfoosterintelligence.co.uk/managementInformation/HUM/>

² Patients at Risk of Re-hospitalisation (PARR) case finding tool

2.2 Clinical productivity - PCTs

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Q4 2008/9



Further information

The Victorian Ambulatory Care Sensitive Conditions Study: Opportunities for Targeting Public Health and Health Services Interventions, December 2002.
<http://www.health.vic.gov.au/healthstatus/downloads/healthservices.pdf>

Department of Health. Avoiding and diverting admissions to hospital - A good practice guide
<http://www.dh.gov.uk/assetRoot/04/07/11/22/04071122.PDF>

Dr Foster Intelligence. High-impact User Manager (HUM) Tool
<http://www.drfoosterintelligence.co.uk/managementInformation/HUM/>

The King's Fund. Patients at Risk of Re-hospitalisation (PARR) case finding tool
http://www.kingsfund.org.uk/health_topics/patients_at_risk/index.html

NHS networks. Predictive risk project
<http://www.networks.nhs.uk/62.php>

NHS Institute for Innovation and Improvement. Delivering Quality and Value. Focus on: Productivity and Efficiency. April 2006

Ambulatory care sensitive conditions

COPD, angina (without major procedure), ENT infections, convulsions and epilepsy, congestive heart failure, asthma, flu and pneumonia (>2 months old), dehydration and gastroenteritis, cellulitis (without major procedure), diabetes with complications, pyelonephritis, iron-deficiency anaemia, perforated/bleeding ulcer, dental conditions, hypertension, gangrene, pelvic inflammatory disease, vaccine-preventable conditions, nutritional deficiencies.

For frequently asked questions go to:
www.productivity.nhs.uk/faq

Managing variation in emergency admissions

This indicator shows the ratio of actual emergency admissions to the expected level, given the age, sex and need of the population for 19 conditions. These conditions have been identified as ones where community care can avoid the need for hospitalisation. Over a year, if the number of admissions is exactly as expected, the indicator score would be 100. A figure of 110 would mean a 10% higher admissions than expected. The national average for each quarter fluctuates around 100 reflecting seasonal variations. In general, the lower the rate of emergency admissions for these conditions the better - both for patients and the NHS. The data is for the quarter shown at the top of the page.

For a full definition of how this is calculated go to:
www.productivity.nhs.uk/definitions

Productivity opportunity

This is based on the number of admissions that would be avoided if all trusts achieved a population standardised rate of admission in line with the top quartile performance (for quarter 1 of that year). This is calculated for each condition separately, so a trust that is top quartile overall but less than top quartile in one condition will still show a productivity opportunity. The opportunity is calculated by summing the HRG cost of each admission that would have been avoided if admission rates had been lower. This is the total figure, not a figure per unit of population, larger PCTs will tend to show a larger opportunity. The savings are expressed as annualised figures by multiplying by four the savings of the quarter measured.

For a full definition of how this is calculated go to:
www.productivity.nhs.uk/definitions

The following tables show the ratio of emergency admissions for 19 conditions.

For further information go to www.institute.nhs.uk

For queries about your data, please email productivity@institute.nhs.uk

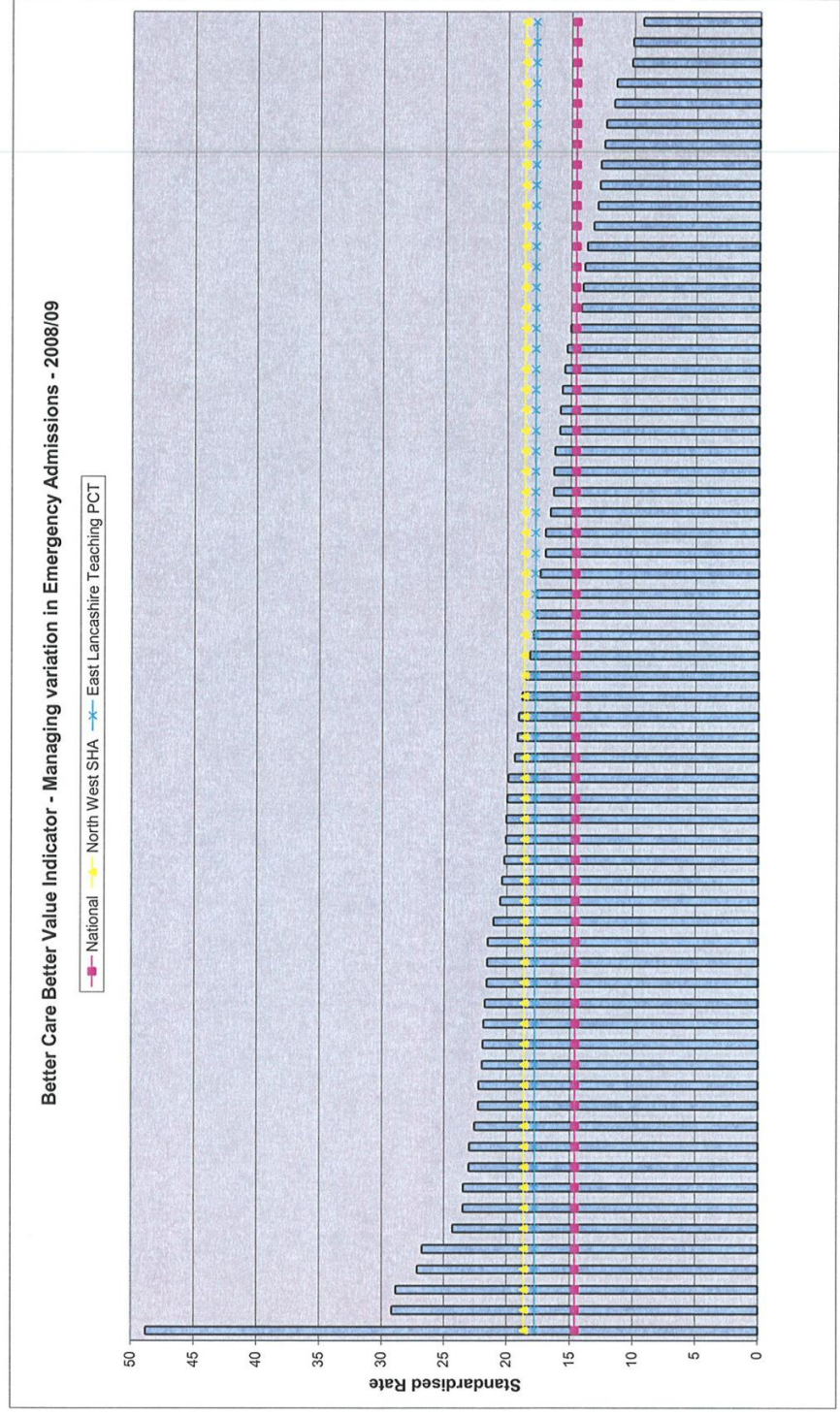
Appendix 9: Variation in Emergency Admissions across General Practices in East Lancashire 2008-09

Managing variation in Emergency Admissions

Data Source: <https://www.nhscomparators.nhs.uk>

A Better Value Better Care (BCBV) comparator. See www.productivity.nhs.uk indicators for "Managing variation in emergency admissions". The rate per 1000 practice population of emergency admissions for 19 conditions. These conditions have been identified as ones where community care can avoid the need for hospitalisation. The purpose of the comparator is to help monitor potentially avoidable emergency/hospital admissions for certain acute illnesses that are amenable to management in a primary care setting. Note the values for this comparator will be different to the BCBV ones as cut-off points for data are different and the BCBV comparators are adjusted for demographic factors other than age (i.e. need)

The chart below shows the rates for GP Practices within NHS East Lancashire for 2008/09.



Appendix 10: Increasing Low Cost Prescribing for Lipid Modification – Q4 2008-9 for NW PCTs

4.3 Prescribing - PCTs & PBCs

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Q4 2008/9



Increasing low cost prescribing for lipid modification

The volume of statin prescribing has increased several fold during recent years and there are large cost differentials between the different statin drugs. By ensuring that clinicians follow national clinical guidelines, PCTs and PBCs can keep prescribing costs for lipid modification down.

The National Institute for Health and Clinical Excellence (NICE) has published comprehensive evidence-based guidance for use of lipid modifying drugs in a range of clinical situations. There are five statins currently approved for use within the UK for the treatment of high cholesterol: atorvastatin, fluvastatin, pravastatin, rosuvastatin and simvastatin. However these drugs vary markedly in price. There are non-proprietary versions of simvastatin and pravastatin, so by prescribing these two drugs generically clinicians can help keep prescribing costs down. Ezetimibe inhibits the intestinal absorption of cholesterol and is licensed as an add-on to statin and/or dietary therapy in hypercholesterolaemia. It is not licensed for primary or secondary prevention of cardiovascular disease.

NICE guidelines cover the following clinical situations :

- Primary prevention of cardiovascular disease
- Secondary prevention of cardiovascular disease
- Acute coronary syndromes
- Diabetes mellitus (type 2)

For the majority of these patients, simvastatin will be a rational and cost-effective first choice drug, with extensive evidence of clinical effectiveness and safety, and a low cost. However, a minority of patients may need alternative (such as pravastatin) or additional drug treatment. NICE guidelines clearly state the clinical situations where this is the case. A high proportion of prescribing for simvastatin and pravastatin will mean lower prescribing costs. The indicator measures the percentage of scripts written for simvastatin and pravastatin. This is given as a percentage of the total number of prescriptions for all statins including combinations of Ezetimibe with statins.

Patterns of prescribing

The number of prescriptions for statins is continuing to increase although there has been a significant change in the product mix of statins used over recent months. Current expenditure on statins is around £500 million a year. A 28-day course of a branded statin is on average about 6 times more costly than an appropriate generic

statin. If PCTs with below 78% use (achieved by the top quartile of trusts) of lower cost statins increased this to 78% over £64 m would be saved in a year (based on quarter 1, 2008/09).

Strategies to managing variation in medicines used for lipid modification:

- Ensure NICE recommendations on lipid modification are followed
- Prescribing audit of new prescriptions for statins to check NICE recommendations are being complied with. Changing practice with new prescriptions is the simplest way to bring down rates of prescription of expensive statins.
- Regular audits of statin prescribing to ensure NICE guidance is being complied with. There may be clinical reasons why some patients need to take a more expensive statin initially. Lower cost drugs, such as simvastatin or pravastatin, might not suit all patients. If the drug chosen first is poorly tolerated and leads to adverse reactions which cannot be addressed by modifying the dose, the patient may need to be transferred to another statin. However, in the absence of these factors simvastatin (or pravastatin) should be prescribed. NICE recommends high intensity statins for patients with acute coronary syndromes.
- Prescribing audit of patients who have been taking statins for some time. These patients might be suitable to be transferred by GPs to a low-cost statin, such as simvastatin or pravastatin, provided that there are no clinical reasons for them to continue on the more expensive drug. Patients should be involved in decisions made about their medicines.
- Review the prescribing of ezetimibe to ensure that its use is appropriate to the patient's clinical condition and in line with licensed indications.

NHS Better Care, Better Value Indicators

Tables start on page 3 of 3 ►

National Prescribing Centre

This NHS organisation, supported by the Department of Health, provides comprehensive and up-to-date resources to support prescribing and medicines management initiatives. This includes access to the latest evidence-based therapeutics and medicines management information, the MeReC publications portfolio, online learning materials (including blogs and podcasts) and a local NPC associate network to facilitate local improvement activities. The NPC produces a range of national support materials through NPCi, a unique web-based learning portal.

National Prescribing Centre website :

www.npc.co.uk

NPCi online learning portal :

www.npci.org.uk

References and Further information

NICE. Statins for the prevention of cardiovascular events, January 2006.

www.nice.org.uk/page.aspx?o=TA094guidance

PACT Centre - Primary prevention of cardiovascular disease, May 2005

www.ppa.org.uk/news/pact-052005.htm

Drug Tariff online

www.ppa.org.uk/ppa/edt_intro.htm

NICE clinical guideline 67: Lipid modification.

Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease. May 2008

http://www.nice.org.uk/nicemedia/pdf/CG67NICEguide_line.pdf

eMedicines Compendium. (Available at <http://emc.medicines.org.uk/>)

NICE CG66 (update). Type 2 diabetes: The management of type 2 diabetes (update) May 2008

[www.nice.org.uk/guidance/index.jsp?](http://www.nice.org.uk/guidance/index.jsp?action=byID&o=11983)

[action=byID&o=11983](http://www.nice.org.uk/guidance/index.jsp?action=byID&o=11983)

Percentage of low cost medicines

The indicator is the number of prescription items for low cost statins (simvastatin and pravastatin). This is expressed as a percentage of the total number of prescriptions for all statins including combination of Ezetimibe with statins.

The data is for the quarter shown at the top of the page.

For a full definition of how this is calculated go to:

www.productivity.nhs.uk/definitions

Productivity opportunity

This is the money that would be saved if every PCT achieved a 78% rate of low cost statin prescribing.

This is the level achieved by the top quartile of trusts in Q1 2008/9. The average cost for prescriptions for simvastatin and pravastatin together is substituted for the average cost for other statins, to reach 78%. Greater savings will be achieved for larger shifts. Savings are expressed as annualised figures by multiplying by four the savings of the quarter measured.

For a full definition of how this is calculated go to:

www.productivity.nhs.uk/definitions

For frequently asked questions go to:

www.productivity.nhs.uk/faq

The following tables show the percentage of low cost statin prescribing relative to total statin prescribing.

For further information go to www.institute.nhs.uk

For queries about your data, please email productivity@institute.nhs.uk

Increasing low cost prescribing for lipid modification

SHA: North West

National position		Percentage of low-cost medicines	Productivity opportunity	Change from last period
21	Blackburn with Darwen PCT	81.02	£0	▼ -0.23
NATIONAL TOP QUARTILE: Trusts above this line performed in the top 25% [78.71%]				
62	Cumbria PCT	76.95	£145,842	▲ +0.05
92	East Lancashire Teaching PCT	74.32	£383,119	▼ -0.07
NATIONAL AVERAGE Grey shading indicates poorer than average performance [74.01%]				
104	Warrington PCT	73.10	£267,920	▲ +0.47
120	Wirral PCT	69.86	£808,811	▲ +0.52
121	Stockport PCT	69.66	£704,355	▲ +1.89
123	Blackpool PCT	68.97	£389,595	▼ -0.06
128	Salford PCT	67.91	£664,687	▲ +0.72
129	Trafford PCT	67.88	£675,456	▲ +0.44
132	Bolton PCT	66.95	£893,705	▲ +0.21
133	Western Cheshire PCT	66.70	£738,669	▲ +0.12
135	Knowsley PCT	65.99	£620,512	▲ +0.80
136	North Lancashire PCT	65.89	£1,101,839	▲ +0.26
138	Halton and St. Helens PCT	65.04	£1,304,709	▲ +2.18
139	Central Lancashire PCT	64.99	£1,486,270	▲ +0.72
140	Heywood, Middleton and Rochdale PCT	64.53	£809,567	▲ +2.09
142	Ashton, Leigh and Wigan PCT	63.92	£1,422,108	▲ +0.53
143	Central and Eastern Cheshire PCT	63.88	£1,836,875	▲ +1.17
145	Manchester PCT	62.71	£1,812,102	▲ +1.11
146	Sefton PCT	62.04	£1,303,871	▲ +0.66
147	Liverpool PCT	61.95	£2,108,074	▲ +0.96
148	Tameside and Glossop PCT	59.10	£1,293,206	▲ +1.76
150	Bury PCT	57.04	£1,053,982	▲ +1.30
151	Oldham PCT	55.94	£1,329,322	▲ +2.77

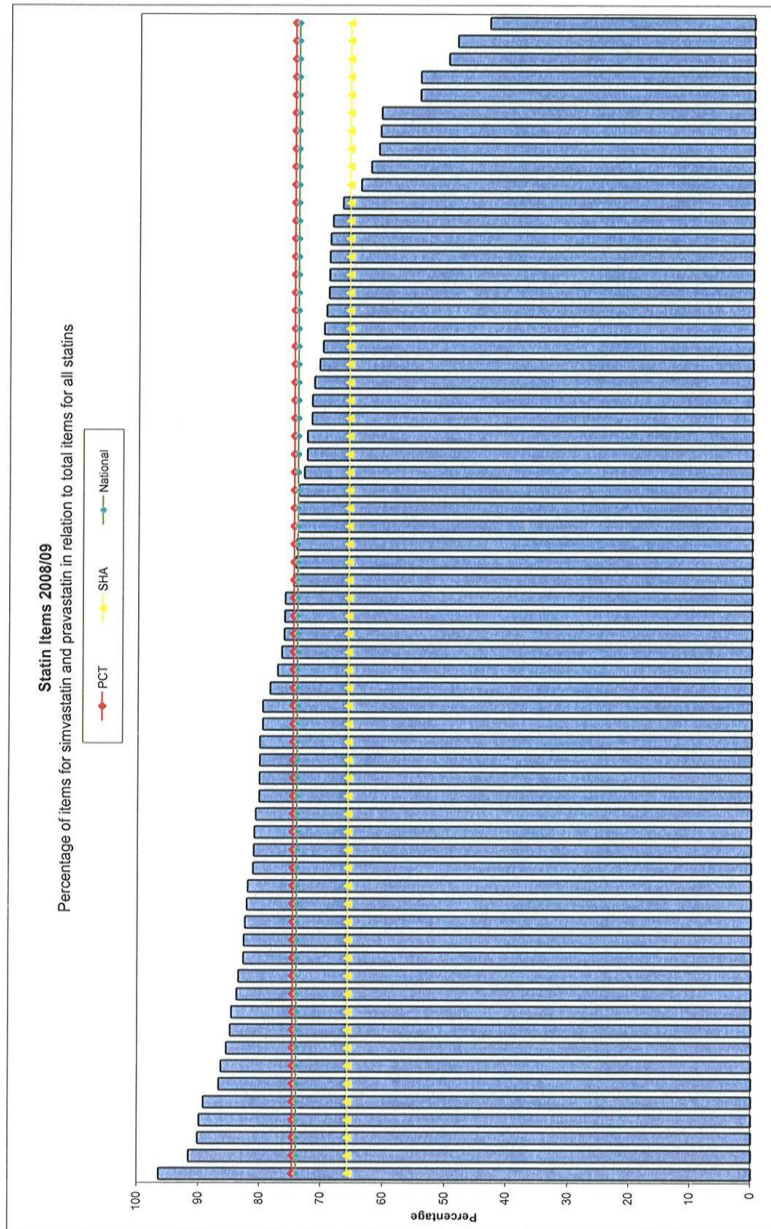
23,154,596

The change from last period gives the absolute value change in the indicator compared to the previous quarter. A green arrow indicates an improvement and a red arrow indicates a deterioration in performance. The changes reflect both real changes and also changes in data quality, especially in the case of larger changes. Where a trust provided invalid data in the last quarter, or it is a new organisation, no change is shown.

4.3 Percentage of low cost medicines: The indicator is the number of prescription items for low cost statins (simvastatin and pravastatin). This is expressed as a percentage of the total number of prescriptions for all statins including combination of ezetimibe with statins. The data is for the quarter shown at the top of the page.

Appendix 11: Variation in Low cost prescribing for Lipid Modification across General Practices in East Lancashire 2008-09

Statins
Data Source: Epcat



Increasing low cost proton pump inhibitor prescribing

Dyspepsia is common in the adult population. Estimates suggest that up to 40% of people will suffer from one or more episodes of dyspepsia in a year ¹.

Proton pump inhibitors (PPIs) make up the majority of prescriptions for dyspepsia and the volume of prescribing of PPIs continues to grow. There are large cost differentials between the different PPIs that are available. By ensuring that clinicians initiate patients on one of the lower cost drugs, PCTs and PBCs can keep PPI prescribing costs down.

There are five PPIs currently approved for use within the UK for the management of dyspepsia: esomeprazole, lansoprazole, omeprazole, pantoprazole, and rabeprazole. However these drugs vary markedly in price. Some formulations are also more costly than alternatives eg. Zoton FasTab® and Losec MUPS®. There are non-proprietary versions of omeprazole and lansoprazole, so by prescribing these two drugs generically, clinicians can prescribe more cost-effectively.

The indicator measures the percentage of scripts written for omeprazole and lansoprazole (excluding Zoton FasTab® and Losec MUPS®). This is given as a percentage of the total volume of PPI prescribing. A high proportion of prescribing for these PPIs will mean lower prescribing costs.

Patterns of prescribing

Although prescribing costs of medicines for dyspepsia are relatively stable, there was a 12.9% increase in PPI items between September 2006 and September 2007 ². This may reflect the impact of NICE guidance on prescribing of gastroprotective PPIs for patients with osteoarthritis.³ Current expenditure on PPIs in primary care is around £150 million a year. A monthly course of a branded PPI is on average about 5 times more costly than an appropriate generic PPI. If PCTs with below 91% use (achieved by the top quartile of trusts) of lower cost PPIs increased this to over 91%, £22 m would be saved in a year (based on quarter 1, 2008/09).

Strategies to increase low cost PPI prescribing:

- Audit new prescriptions for PPIs to check NICE recommendations are being followed. Changing practice with new prescriptions is the simplest way to bring down rates of prescription of expensive PPIs.
 - Regular audits of current PPI prescribing should ensure NICE guidance is being followed. Lower cost drugs, such as omeprazole or lansoprazole, might not suit all patients. If the drug first chosen is poorly tolerated, fails to control symptoms or leads to adverse reactions which cannot be addressed by modifying the dose, the patient may need to be transferred to another PPI. However, in the absence of these factors omeprazole or lansoprazole should be prescribed.
 - Prescribing audit of patients who have been taking PPIs for some time. Many patients may not need regular prescriptions and can be safely swapped to a lower dose or stepped off treatment, in accordance with NICE guidance. Others that clinically require maintenance therapy can be transferred by GPs to a low-cost PPI, such as omeprazole or lansoprazole, provided that there are no clinical reasons for them to continue on the more expensive drug.
 - Analyse prescribing data down to GP practice level and offer prescribing advice to GP practices prescribing more expensive PPIs without good clinical reason.
 - Encourage community pharmacists to consider medicines use reviews in customers presenting repeat prescriptions for proton pump inhibitors.
- Ensure that NICE recommendations on prescribing for dyspepsia are followed. NICE guidance ¹ suggests that at population level the only significant difference between equivalent doses of PPIs is cost to the NHS. In addition, the guidance recommends that when therapy is initiated, the PPI chosen should usually be of low acquisition cost.

4.5 Prescribing - PCTs & PBCs

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National Prescribing Centre

This NHS organisation, supported by the Department of Health, provides comprehensive and up-to-date resources to support prescribing and medicines management initiatives. This includes access to the latest evidence-based therapeutics and medicines management information, the MeReC publications portfolio, online learning materials (including blogs and podcasts) and a local NPC associate network to facilitate local improvement activities. The NPC produces a range of national support materials through NPCi, a unique web-based learning portal.

National Prescribing Centre website :

www.npc.co.uk

NPCi online learning portal :

www.npci.org.uk

Further information

Drug Tariff online www.drugtariff.com

References

¹ NICE. Dyspepsia. Management of dyspepsia in adults in primary care. Clinical guideline CG017. National Institute for Clinical Excellence (2004) [updated 2005]

² Update on growth in prescription volume and cost in the year to September 2007. NHS Business Services Authority (Prescription Pricing Division) (2007)
http://www.ppa.org.uk/pdfs/publications/SMT_V&C_report_2007_09.pdf

³ NICE Osteoarthritis. The care and management of osteoarthritis. CG59. National Institute for Health and Clinical Excellence. London ("008)
<http://www.nice.org.uk/nicemedia/pdf/cg59niceguideline.pdf>

Percentage of low cost PPI prescribing

The indicator is the number of prescription items for low cost PPIs (omeprazole and lansoprazole) excluding Zoton FasTab® and Losec MUPS®. This is expressed as a percentage of the total number of prescriptions for all PPIs (excluding combination products for H. pylori eradication). The data is for the quarter shown at the top of the page.

For a full definition of how this is calculated go to:
www.productivity.nhs.uk/definitions

Productivity opportunity

This is the money that would be saved if every PCT achieved a 91% rate of low cost PPI prescribing. This is the level achieved by the top quartile of trusts in Q1 2008/09. The average cost for prescriptions for omeprazole and lansoprazole together is substituted for the average cost for other PPIs, to reach 91%. Greater savings will be achieved for larger shifts. Savings are expressed as annualised figures by multiplying by four the savings of the quarter measured.

For a full definition of how this is calculated go to:
www.productivity.nhs.uk/definitions

For frequently asked questions go to:
www.productivity.nhs.uk/faq

The following tables show the percentage of low cost PPI prescribing relative to total PPI prescribing. For further information go to www.institute.nhs.uk
For queries about your data, please email productivity@institute.nhs.uk

Increasing low cost proton pump inhibitor prescribing

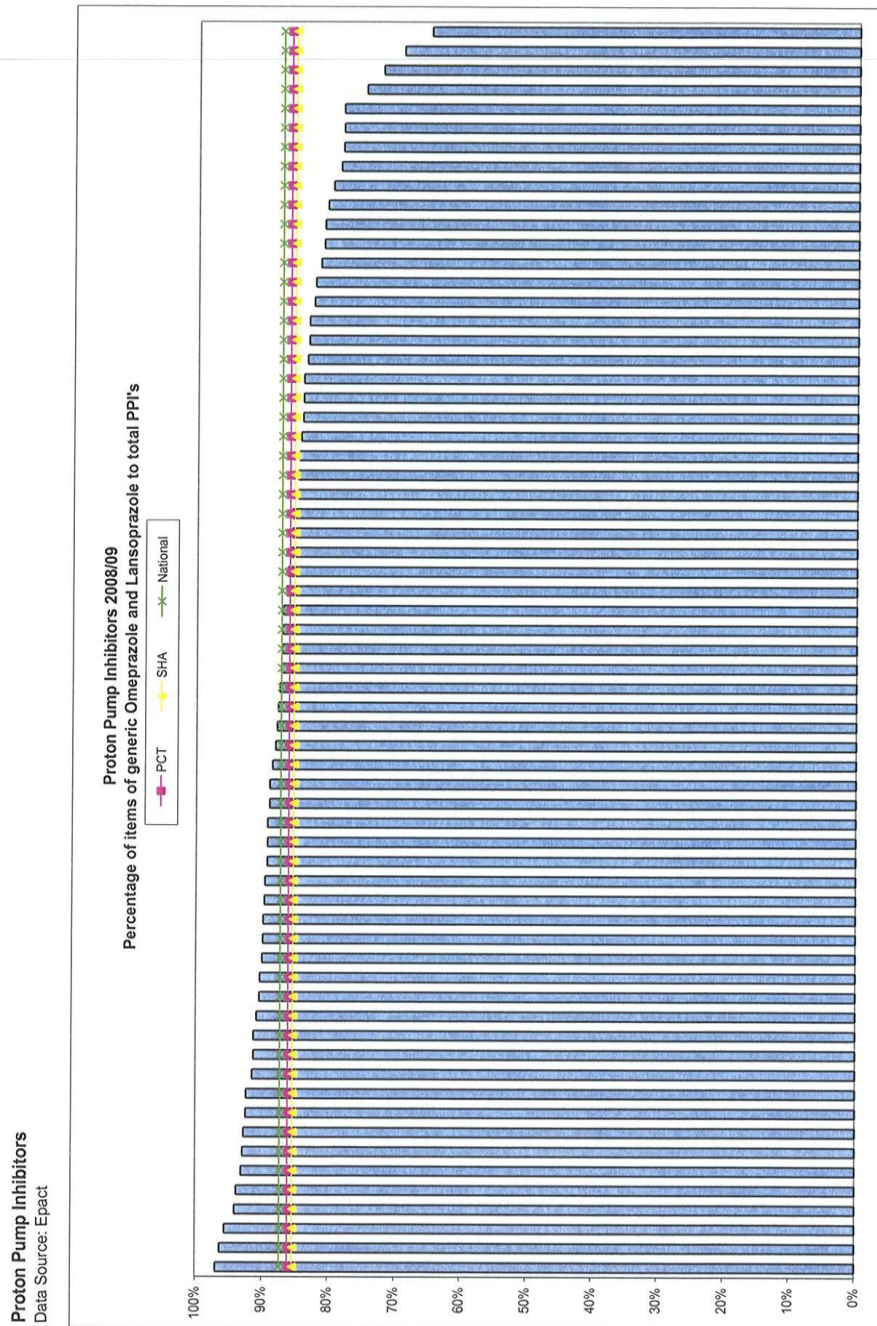
SHA: North West

National position		% of low-cost PPIs	Productivity opportunity	Change from last period
49	Warrington PCT	90.77	£6,412	▲ +0.48
50	Cumbria PCT	90.74	£14,021	▲ +0.45
67	Salford PCT	89.85	£43,710	▲ +0.73
69	Blackburn with Darwen PCT	89.79	£25,030	▲ +0.20
73	Heywood, Middleton and Rochdale PCT	89.61	£44,807	▲ +0.25
76	Knowsley PCT	89.49	£34,206	▲ +0.37
92	Blackpool PCT	88.77	£53,372	▲ +0.51
NATIONAL AVERAGE Grey shading indicates poorer than average performance [88.75%]				
97	Wirral PCT	88.47	£123,814	▲ +0.18
104	Manchester PCT	87.91	£210,544	▲ +0.12
105	Bury PCT	87.74	£89,348	▲ +0.38
107	Sefton PCT	87.70	£137,189	▼ -0.02
110	East Lancashire Teaching PCT	87.24	£188,390	▲ +0.67
111	Stockport PCT	87.18	£167,743	▲ +0.76
116	Liverpool PCT	86.89	£278,220	▲ +0.79
121	Central Lancashire PCT	86.51	£227,790	▼ -0.03
122	Trafford PCT	86.44	£168,299	▲ +0.26
124	Halton and St. Helens PCT	85.94	£261,931	▼ -0.10
136	North Lancashire PCT	84.37	£302,481	▲ +0.24
137	Tameside and Glossop PCT	83.20	£283,616	▲ +0.90
142	Central and Eastern Cheshire PCT	82.43	£566,441	▲ +0.34
147	Oldham PCT	81.90	£277,517	▲ +0.59
148	Ashton, Leigh and Wigan PCT	81.83	£450,329	▲ +0.49
149	Western Cheshire PCT	81.35	£301,090	▼ -0.26
151	Bolton PCT	75.47	£629,766	▲ +1.41

The change from last period gives the absolute value change in the indicator compared to the previous quarter. A green arrow indicates an improvement and a red arrow indicates a deterioration in performance. The changes reflect both real changes and also changes in data quality, especially in the case of larger changes. Where a trust provided invalid data in the last quarter, or it is a new organisation, no change is shown.

4.5 Increasing low cost PPI prescribing: The indicator is the number of prescription items for low cost PPIs (omeprazole and lansoprazole) excluding Zoton FasTabs® and Losec MUPS®. This is expressed as a percentage of the total number of prescriptions for all PPIs (excluding combination products for H. pylori eradication). The data is for the quarter shown at the top of the page.

Appendix 13: Variation in Low cost prescribing for Proton Pump Inhibitors (PPIs) across General Practices in East Lancashire 2008-09



Appendix 14: Increasing Low Cost Prescribing for Drugs affecting the Renin-Angiotensin System – Q4 2008-9 for NW PCTs

4.6 Prescribing - PCTs & PBCs

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Q4 2008/9



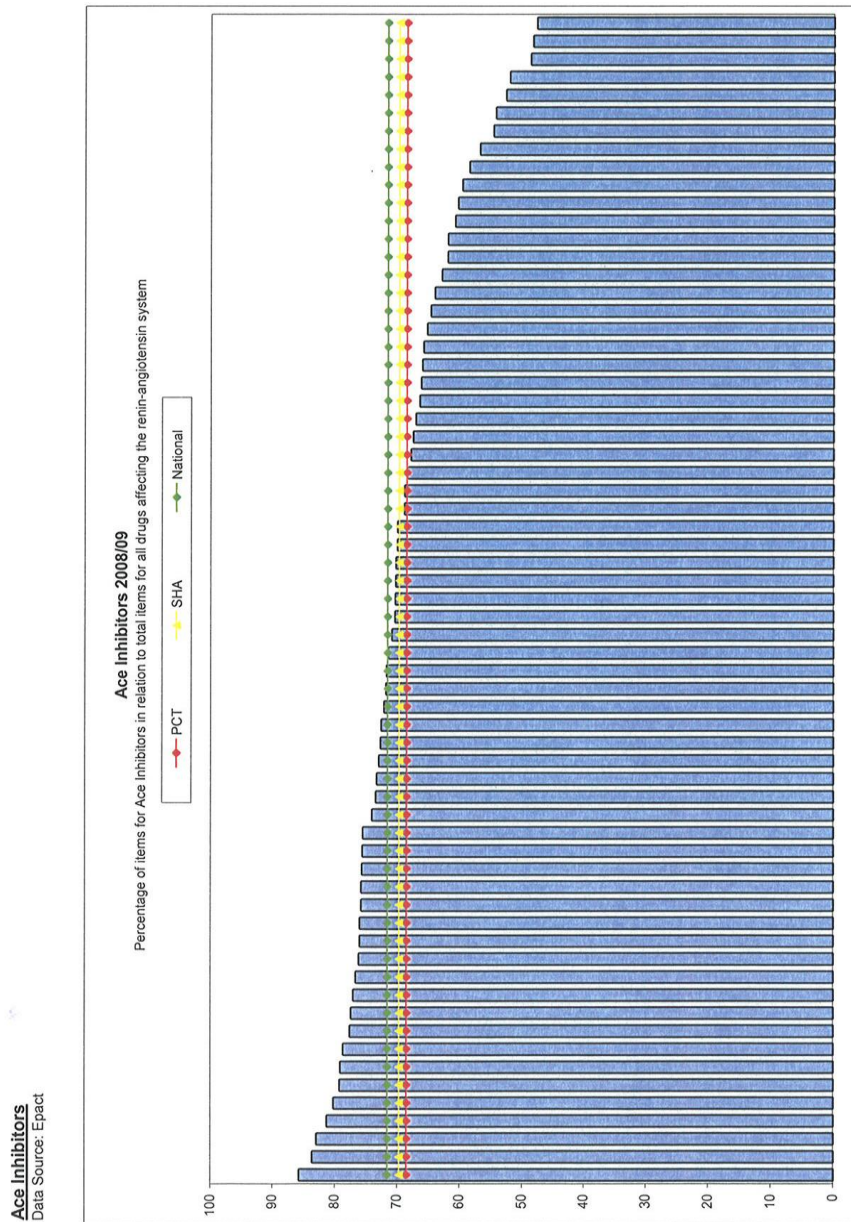
Low cost prescribing for drugs affecting the renin-angiotensin system

SHA: North West				
National position		% of low-cost ACEI	Productivity opportunity	Change from last period
32	Knowsley PCT	74.51	£0	▲ +0.09
36	Central Lancashire PCT	74.27	£0	▲ +0.21
NATIONAL TOP QUARTILE: Trusts above this line performed in the top 25% [74.00%]				
50	Liverpool PCT	73.56	£29,702	▲ +0.35
71	Cumbria PCT	72.17	£141,757	▲ +0.15
72	Blackpool PCT	72.15	£44,587	▲ +0.38
73	Salford PCT	72.08	£74,775	▼ -0.01
74	Sefton PCT	72.02	£80,958	▼ -0.07
75	Ashton, Leigh and Wigan PCT	72.00	£106,334	▼ -0.15
NATIONAL AVERAGE Grey shading indicates poorer than average performance [71.41%]				
84	Trafford PCT	71.14	£92,072	▲ +0.27
92	Central and Eastern Cheshire PCT	70.67	£261,001	▲ +0.24
96	North Lancashire PCT	70.20	£196,858	▲ +0.20
104	Manchester PCT	69.72	£261,211	▲ +0.39
108	Western Cheshire PCT	69.38	£168,170	▼ -0.10
109	Tameside and Glossop PCT	69.19	£195,485	▲ +0.33
111	Warrington PCT	69.12	£143,227	▲ +0.14
115	Halton and St. Helens PCT	69.04	£245,900	▲ +0.30
121	East Lancashire Teaching PCT	68.40	£311,723	▲ +0.06
123	Blackburn with Darwen PCT	68.31	£123,226	▼ -0.32
130	Heywood, Middleton and Rochdale PCT	67.44	£187,852	▲ +0.34
131	Stockport PCT	66.99	£298,032	▲ 0.00
132	Bury PCT	66.93	£176,898	▼ -0.06
134	Wirral PCT	66.51	£381,583	▲ +0.23
148	Oldham PCT	62.98	£364,306	▲ +0.45
151	Bolton PCT	60.11	£563,286	▲ +0.37

The change from last period gives the absolute value change in the indicator compared to the previous quarter. A green arrow indicates an improvement and a red arrow indicates a deterioration in performance. The changes reflect both real changes and also changes in data quality, especially in the case of larger changes. Where a trust provided invalid data in the last quarter, or it is a new organisation, no change is shown.

4.6 Percentage of drugs affecting the renin-angiotensin system: The indicator measures the percentage of scripts written for ACEI (excluding combination products). This is expressed as a percentage of the total volume of prescribing for drugs affecting the renin-angiotensin system (excluding combination products). A high proportion of prescribing for ACEI will mean lower prescribing costs. The data is for the quarter shown at the top of the page.

Appendix 15: Variation in Low cost prescribing for drugs affecting the Renin-Angiotensin System across General Practices in East Lancashire 2008-09



Appendix 16: Early Draft of the East Lancashire Practice Development Framework (PDF) Balance Score Card (BSC)

**NHS EAST LANCASHIRE
GP PRACTICE BALANCED SCORECARD**

STATUTORY				QUALITY			
		PCT Average	England Avg	PCT COMPAREABLES		Perf against prev year	Band
				PCT Avg 07/08	NHS NW Avg 07/08	England Avg 07/08	
Contractual and Statutory Premises		23		961	963	968	944
Clinical Governance		11		637	636	638	627
Infection Control		91		167	169	171	159
				35	35	35	35
				102	105	105	105
GoF Clinical Domains							
				82	82	82	81
				19	20	19	19
				23	24	23	23
				91	91	91	88
				88	88	88	88
				32	32	32	31
				11	11	11	11
				67	67	67	67
				30	29	29	29
				194	191	196	189
ACCESS AND PATIENT EXPERIENCE							
		PCT COMPAREABLES				Perf against prev year	Band
		PCT Avg	England Avg				
Appointment within 48 hrs		86	87	87	85	85	85
Telephone Access		87	88	87	86	86	86
Advanced Booking		73	76	77	72	72	72
Specific GP		87	88	88	86	86	86
Public Health							
Opening Hours		48 hrs Average		79	78	78	80
GP Extended Hours		80% of Practices		88			88
				79			81
				69			70
PCT Rating for Access and Patient Experience				PCT Rating for Quality			
Overall PCT Rating							