EXPLORING THE ORGANISATIONAL IMPACT OF THE NHS QUALITY AND OUTCOMES FRAMEWORK (QOF) IN GP PRACTICES

MOHAMMAD SHARIF IBRAHIM ALYAHYA

PhD Thesis

The University Of York

The York Management School

June 2011

ABSTRACT

The NHS Quality and Outcomes Framework (QOF) is a Payment for Performance (P4P) scheme that was launched on 1 April 2004, as a key feature of the *new* General Medical Service (GMS) contract. Previous research has revealed that GP practices made several organisational changes after the introduction of QOF. However, there is no clear evidence on how the change process was undergone in practices and what factors contributed to this process. Thus, this thesis is interested in exploring the change process from the perspective of organisational memory. The primary aim is to explore how and why QOF served as a trigger for change in influencing the direction of GP practices and the extent of change that was made in GP practices because of QOF.

An in-depth qualitative case study was conducted in four large GP practices in the north of England. Semi-structured interviews with thirty nine informants, including 15 GP partners, 2 salaried GPs, 4 practice managers, 9 nurses, 2 healthcare assistants (HCAs) and 7 administration staff were considered as the main source of data.

The study was able to provide evidence that the GP practices developed their strategy to respond to QOF, based on their organisational memory and competence. It was also found that organisational structure contributed strongly to the enhancement of organisational memory, which in turn led to better organisational competence. These findings provide insight into practices engaging in an emergent type of change. This was evident through their strategic decision making and the idea of *contextualism,* which underlay their unique responses during the changes. The study revealed that the practices were engaged in predominantly strategic level change. The significant contribution of this thesis is how organisational memory and competence could be used to understand the phenomenon of change in health care settings.

Keywords: *QOF, Pay for Performance, Organisational Memory, Competence(s), Organisational Change, Organisational Strategy, Organisational Structure.*

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGMENT

AUTHOR'S DECLARATION

All the research presented in this thesis was initiated and carried out by the author between October 2007 and June 2011 under the supervision of Professor Matthias Beck, who commented and gave suggestions on the design, conduct of the project, analysis of the data and interpretation of the results. However, the author is responsible for the research presented in this thesis.

Mohammad Alyahya

June 2011

DEDICATION

I present this thesis for

my beloved Dad and Mom,
whose prayers never cease to accompany my journey
through life.

Also, to my dearest daughter,
whose bravery and patience I admire most

CHAPTER 1
RESEARCH OVERVIEW

1.1. INTRODUCTION

The NHS Quality and Outcomes Framework (QOF) is a Payment for Performance (P4P) system which uses financial incentives to motivate General Practitioners (GPs) to meet specified quality targets (NHS_The_Information_Centre, 2006; NAO, 2008). Evidence from previous research indicates that financial incentives can improve the performance of healthcare providers in particular context (Cutler et al., 2007; Tahrani et al., 2007; Cupples et al., 2008; Falaschetti et al., 2009a; Falaschetti et al., 2009b). Whilst financial incentives have been reported to improve performance and influence behaviour in beneficial ways, the impact of such rewards has been shown to be of limited duration, and induce a range of unintended and dysfunctional consequences for organisations, staff and patients (Doran et al., 2006; Fleetcroft et al., 2008; Grant et al., 2009; McDonald and Roland, 2009).

Since its introduction in 2004, QOF has represented a significant proportion of public expenditure, costing the UK economy approximately £1 billion per annum (Campbell, McDonald and Lester, 2008). GPs can increase their income by up to 25% per annum, depending on their performance as measured against 134 predefined quality indicators. The quality metrics are classified in terms of four domains: i) clinical care, ii) organisational, iii) patient experience, and iv) additional services (Roland, 2004; NHS_The_Information_Centre, 2006). For each domain, practices are able to claim points corresponding with their performance, which are then translated into the financial rewards distributed to the practices.

While QOF has been said to achieve its target of improving health care services through meeting clinical and organisational targets and increasing physician's

remuneration (Greene and Nash, 2008; Gravelle, Sutton and Ma, 2009), it has also been reported as resulting in a range of unintended dysfunctional consequences (McDonald and Roland, 2009). The unintended effects of the QOF programme identified in previous research include mispresentation of data, the erosion of internal motivation (crowding out), the avoidance of very ill patients (adverse selection) and focusing on dimensions of performance included in the measurement system, to the detriment of other important areas of performance not included in the measurement system (tunnel vision) (Gravelle, Sutton and Ma, 2007; Doran et al., 2008b; Mannion and Davies, 2008a; McDonald et al., 2008; Gravelle, Sutton and Ma, 2009).

With this debate, a better understanding of How and Why QOF scheme has affected GP practices is timely given the increased reliance on such scheme to deliver improved quality and performance in health systems around the world.

1.2. SCIENTIFIC JUSTIFICATION FOR THE STUDY

Most previous research on the impact of the QOF used quantitative and econometric methods and focused primarily on exploring the association between QOF effectiveness and practice characteristics (Ashworth and Armstrong, 2006; Doran et al., 2006; Guthrie, McLean and Sutton, 2006; Wright et al., 2006; Doran et al., 2010; Griffiths et al., 2010), the characteristics of patient populations (Sutton and McLean, 2006; Ashworth et al., 2007; Ashworth, Medina and Morgan, 2008; Doran et al., 2008a), and the effect on quality of specific medical conditions, such as diabetes and chronic heart diseases (Campbell et al., 2007; Tahrani et al., 2007; Campbell et al., 2009; Griffin and Graffy, 2009).

Moreover, a large part of the literature has shown that the engagement of GP practices with QOF has encouraged them to make adjustments to their systems, these adjustments represent organisational changes. These changes include increasing the number of staff, structural rearrangements, installing Information Technology (IT) systems and setting up new chronic disease clinics (e.g. Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester,

2008; Grant et al., 2008; Huby et al., 2008; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Gemmell et al., 2009; McDonald et al., 2009; Checkland and Harrison, 2010). Yet, whether the practices' engagement in such decisions fitted their organisational strategy and structure is still unknown.

In their study, Huby et al. (2008) found that large-scale GP practices ran the practice as a business, so that their adaptation to QOF reflected the practices' strategic decisions. In fact, what the authors discovered during the observation was rather different from the story respondents told them. This difference in the stories can be seen as part of the sense-making processes of people in understanding change. Indeed, as stated by Wilson (1992), organisational change can be understood through individuals' perception of specific situations. This implies a need to understand and analyse the narrative of change as stories told by members of organisations. The need to pay attention to stories of change was also highlighted by Checkland and Harrison (2010). While there is evidence that QOF caused several changes, it was found that people in GP practices tried to convey the message that QOF had brought little or no change to their activities, as they already had such activities prior to QOF (Checkland and Harrison, 2010). These studies raise questions as to why there is a discrepancy between the stories of practice staff and reality, and whether organisation staff contribute to shaping an understanding of change processes in their organisation.

Members of an organisation are considered to be one of the main knowledge repositories in the organisation and hence contribute to building Organisational Memory (OM) (Walsh and Ungson, 1991; Abel, 2008; King, 2009). OM is an organisation's stored knowledge which can be used to explain and justify the processes and results of organisational change (Adler, Goldoftas and Levine, 1999; Feldman, 2000; Becker, 2004; Hanvanich, Sivakumar and M. Hult, 2006; Tsai, Lin and Chen, 2010). More specifically, OM is a generic concept which refers to managing knowledge, information and intangible assets as a key organisational competence, which leads to organisational success (Stein and Zwass, 1995; Wijnhoven, 1999).

3

Only a very limited number of studies focused on the link between organisational memory and QOF as a trigger of organisational change. GP practices were reported to experience various changes in their strategy, structure, IT systems and other organisational processes (Checkland, 2007; Checkland, McDonald and Harrison, 2007; McDonald et al., 2009; Checkland and Harrison, 2010). The authors linked these changes to the notion of memory through the stories shared by members of GP practices on the change processes (Checkland, 2007; Checkland and Harrison, 2010). Thus, this study is interested in investigating the organisational change process from the perspective of organisational memory.

1.3. THE AIM AND OBJECTIVES OF THE STUDY

To comprehend the impact of QOF in practice organisations, the main interest of the study lies in how organisational memory constructed organisational competence, which in turn, influenced practice organisations in conducting change. The specific objectives of the study are to:

- Elucidate the influential relationship between organisational memory, competence, strategy and structure;

- Explore how the QOF initiative triggered changes in GP practices;

- Explore the factors that have contributed to the direction of changes in GP practices;

- Identify the extent of organisational change that was made after the introduction of the QOF scheme.

1.4. SIGNIFICANCE OF THE STUDY

Overall, QOF has rarely been discussed in terms of how practices engaged in the change process. The literature review of this study indicates that a gap exists, in terms of lack of research focusing on the linkage between organisational competencies and memory which involves knowledge and skills, and the linkage between OM and organisational change. Set against this background, the study intends to contribute to an improved understanding of how and why QOF has served as a trigger for change in influencing the direction of GP practices and the level of change that was made in GP practices after the introduction of QOF. Accordingly, this research utilises the framework of OM in two ways: firstly, OM as the main source of knowledge in the organisation gives us an in-depth analysis of the organisational changes that have been taken place (Adler, Goldoftas and Levine, 1999; Feldman, 2000; Becker, 2004; Hanvanich, Sivakumar and M. Hult, 2006; Tsai, Lin and Chen, 2010). Secondly, OM as a part of organisational competence (Wijnhoven, 1998, 1999), and competence as an essential constituent for organisational strategy, determines where the organisation is heading (Prahalad & Hamel, 1990; Lei, Hitt and Bettis, 1996; Hahn et al., 2006).

1.5. RESEARCH QUESTION

In order to fulfil the aim of this study and achieve its objectives the following main research question has been formulated: *'how and why does organisational memory contribute to the development of organisational competence in GP practices, and how do these competencies affect organisational change in such practices?* In order to answer this research question three analytical propositions were developed based on several working hypotheses:

Analytical proposition 1:

Organisational memory of core competences in GP practices shapes their organisational strategies in response to QOF.

> *Working Hypotheses:*
>
> *A) The more a GP practice is involved in procedural memory (routines), the more likely it will be competent to implement changes in response to QOF;*
>
> *B) The more GP practices are aware of previous failures and successes and the more they integrated knowledge into their organisational memory, the more able they are to develop an organisational strategy in response to QOF.*

Analytical proposition 2:

More structured and organised GP practices are better able to enhance their organisational memory and competencies to hit QOF targets.

> *Working Hypotheses:*
>
> *A) The higher degree of specialisation a GP practices has, the more competent it becomes at hitting the QOF targets;*
>
> *B) The higher degree of specialization a GP practice has, the more emphasis it places on rules and norms, to ensure knowledge sharing;*
>
> *C) The larger a GP practice, the more formalisation to standardise behaviour there will be.*

Analytical proposition 3:

GP practices respond to QOF by pursuing strategic-level changes.

1.6. THE OUTLINE OF THE THESIS

This thesis is organised in eleven chapters. The outline of each chapter is presented below. At the end of each chapter, a summary is provided.

1. **Chapter 2 – Pay for Performance: Policy and Rationale**

   This chapter provides detailed background information about the development of P4P in healthcare settings, paying particular attention to the implementation of the QOF scheme. The chapter aims to provide the conceptual background for conducting a systematic review and to support the analysis conducted in the following chapters. The review starts with a brief history of how P4P developed over time. This is followed by a discussion of the factors which have contributed to the involvement of the health sector in P4P programmes.

2. **Chapter 3 - Review of Empirical Evidence**

   This chapter presents a systematic review of the empirical evidence on P4P implementation in the healthcare sector. The review focuses on P4P in GP practices and physician groups in Primary Health Care. The chapter starts by providing a summary of previous reviews. Evidence from previous reviews indicates that P4P programmes have mixed results for health care quality, with some dysfunctional consequences.

   The chapter continues by presenting the search protocol, which was employed in the current systematic review. The findings are organised based on the themes which emerged in the review process, including evidence on the effectiveness of P4P in improving health quality, the factors affecting P4P implementation, the dysfunctional consequences and evidence on the organisational memory and change.

3. **Chapter 4 – Theoretical Background**

This research study employs two main bodies of theories, which are organisational change and organisational memory. For organisational change, attention in Chapter 4 is given to process, implementation and levels of change. The chapter also focuses on procedural memory and its role in competence development. In order to address the changes that were conducted by GP practices, the research framework along with three analytical propositions were developed. They were based on the elaboration of those two theories and the concepts of organisational strategy and structure.

4. **Chapter 5 – Research Methodology**

This research is based on an in-depth qualitative case study approach, the study was carried out in four GP practices in the north of England. Triangulation data was used; as a primary source of data, semi-structured interviews were conducted with 39 informants from different professions. Data analysis was conducted using thematic framework analysis. The chapter also addresses the limitations and difficulties experienced during the data collection processes.

5. **Chapter 6 – QOF and Perceived Organisational Change**

This chapter, together with the subsequent three chapters, comprises the empirical part of the thesis. The empirical findings are presented based on the themes that emerged during the data collection and analysis. Chapter 6 focuses on perceived organisational changes in the practices under study. It starts by providing a general description of the practices. The chapter aims to explore how the practices responded to QOF as a new payment strategy and presents the changes perceived by the organisation staff. The findings which will be presented in this chapter show that practices have engaged with changes in their systems in order to accommodate QOF. While positive impacts were reported, this chapter also presents the perceived dysfunctional consequences taking place in the practices.

6. Chapter 7 – Organisational Strategy

This chapter presents changes in practice strategy. It shows that the practices had to follow government regulations, which tended to direct their strategic direction in the first place. However, after 2004, when QOF came in, the practices rearranged their priorities and tried to assess their weaknesses and strengths and find new opportunities for investment to maintain their income, such as establishing chronic disease clinics. This chapter demonstrates that the GP practices became more targets driven and managed more as business organisations.

7. Chapter 8 – Organisational Structure

Chapter 8 delineates how practices conducted changes in their structure. Attention is given to structural arrangements, distribution of job responsibilities, the decision making process and power dynamics. In general, all four practices maintained that they had a flat structure with flexible relationships amongst individuals within the structures. There were different decision making mechanisms that corresponded to different levels of decisions, strategic or operational. After QOF, the organisational structure of the practices become more complex, due to the increase in the number of staff, formalised units/divisions, the establishment of new clinics and the delegation of clinical work to lower level healthcare professionals. In addition, the chapter shows that the characteristics of the relationship between the practices and the PCT were having less bargaining power and feeling more distant.

8. Chapter 9 – Norms and Identity

This chapter presents the perceived changes in both the norms and identity of the practices. Norms were found to exist strongly across members of the practices. Moreover, a strong 'blame-free' norm encouraged individual healthcare professionals to embrace failure and learn from their mistakes. As for identity, all four practices strongly emphasised the identity of being patient-centred practices. However, both QOF and changes in the practices'

internal and external environment contributed to how norms and practices identity had changed.

9. Chapter 10 - Discussion

The discussions in this chapter are presented in four main sections. The first focuses on how practice members perceived the changes caused by QOF and the consequences on their work activities. The second section provides insight about how organisational memory and competence have shaped the practices' organisational strategies to comply with QOF. In section three, the organisational structural changes that were made after QOF and the reasons behind these changes are shown. The last section discusses the various levels of changes and determines the degree of change that took place in the GP practices. The chapter shows that the findings of the study evidence the three analytical propositions. It also compares these findings with the existing literature.

10. Chapter 11 – Conclusion

Chapter 11 is the final chapter of the thesis. It conveys the contribution of knowledge and implications of the study findings. These implications comprise theoretical and organisational implications, as well as suggestions for policy makers seeking to improve the quality of healthcare organisations. The chapter also presents the limitations and challenges that have been recognised in this study and recommendations for future research to enhance knowledge and evidence in this research area.

CHAPTER 2

PAY-FOR-PERFORMANCE:

POLICY AND RATIONALE

2.1. INTRODUCTION

Over the last two decades, there has been an increasing interest in improving the quality of public sector organisations (Vigoda-Gadot et al., 2005). Public organisations are increasingly concerned about the effectiveness of their service delivery, while controlling costs and increasing efficiency. One of the well-known methods used to improve the quality of public services is to adopt private sector management techniques i.e. New Public Management (NPM) reforms (Ferlie, 1996; Brunetto and Farr-Wharton, 2005).

Since 1997, successive labour governments in the UK have heightened the need for improving the performance of public sector providers in education, health, law and order, transport and local government. In primary care, QOF was introduced under the *new* General Medical Services (*n*GMS) contract, as a national P4P scheme, which was conceived as an attempt to recast primary healthcare on the basis of assumptions which are rooted in NPM principles (Goodwin et al., 2008; Grant et al., 2008).

This chapter discusses the growth of P4P schemes in the health sector, with particular emphasis on the implementation of QOF in the English National Health Service (NHS). The chapter starts with a brief history of how P4P developed over time. This is followed by a discussion of the factors which have contributed to the engagement of the health care sector in P4P.

2.2. P4P: HISTORICAL EVOLUTION AND ORIGIN IN HEALTHCARE SECTOR

Over the last decade, efforts to improve the quality of health services have shifted from measuring and publicly reporting data to using financial incentive schemes. One of the most widespread type of these schemes is P4P (Rosenthal et al., 2005; Landon and Normand, 2008; Mannion and Davies, 2008a). P4P is defined as a financial reward scheme that measures aspects of the performance of health care providers and rewards them according to their level of success in meeting specified and predefined performance targets (Baker & Carter, 2005; Baumann and Dellert, 2006; Hahn, 2006).

Three main reasons lie behind the growing adoption of P4P in the health sector. Firstly, there was the failure of traditional payment systems (Fee-for-Service, Capitation and Salary) to motivate and change the behaviour of health providers, overcome the considerable increase in health care cost, improve the quality and reduce the variability in services provided across different regions and among various groups of patients (Bazzoli et al., 2004; Ferman, 2004; Seidel and Nash, 2004; Kirsch, 2006; Bozic, Smith and Mauerhan, 2007). Secondly, there was the widespread use of Information Technology (IT) and Electronic Medical Records Systems (EMR) (Carter, 2004; Accenture, 2005), which were used as valid and reliable quality measures, enabling health providers to document their performance in a way that patients and health care payers could track and understand (Kozinets et al., 1999; Miller, 2005; Sachdeva, 2007). The third reason was political pressure exerted by healthcare payers, such as taxpayers and the government, to control escalating health care costs (Kimmel, Sensmeier and Reeves, 2005; Moser et al., 2006; Bozic, Smith and Mauerhan, 2007).

Despite growing interest in P4P, its basic idea is not novel. The earliest example of P4P can be traced back to the 18th century BC, when King Hammurabi of Babylonia set up the 'Code of Hammurabi', which regulated how incentives for merchants were to be paid, based on their ability to double up the return of investment from the principal (Peach & Wren, 1992). However, until the Middle

Ages, which was dominated by piece-work payment, there was no clear rationale for using incentive systems (Roberts, 1958 as cited in Peach & Wren, 1992). During the era of industrialisation, the debate about 'hungry man' versus 'economic man'[1] led economists to raise several questions about the importance of wages and their effects on productivity (Smith, 1776 as cited in Briggs, 1969). This era was characterised by using a piece-rate payment, task wages and fixed daily pay (Lipson, 1948 as cited in Peach & Wren, 1992). Some initial attempts towards group-based P4P emerged, although the impact on labour productivity was reported to be weak (Pollard, 1993).

While using financial incentives evolved over time, it was the movement of scientific management, advocated by Frederick W. Taylor in the early 1900s, that established the basis of modern incentives schemes. Taylor broke down each job into its component tasks, to find the most time-efficient and best method of doing it. Once the best method had been found, skilled workers who could perform each task were selected and rewarded for each produced unit. Taylor also created a differential payment rate; the workers who could achieve the target number of units would receive extra money, while those who could not achieve the target, would receive an ordinary payment. Gantt realised that this differential payment rate failed to motivate workers to produce more units than the targeted amount. To overcome this, Gantt and Emerson developed a bonus system to reward workers who exceeded the target number of produced units or completed job within the time. In that era, Frank and Lillian Gilbreth also played an important role in developing modern incentive schemes; they used monetary incentives in the same way that Taylor had used them. However, the Gilbreths believed that although Taylor had emphasised the importance of training and development, and good supervisory support and communication with individual workers, they felt that money as prime motivator was overvalued in his scheme. They believed that a broader consideration of human elements of work with financial incentives was needed to establish an effective motivational system (Nadworny, 1957; Louden,

---

[1] The assumption of 'hungry man' was based on the idea that people tend to spend their wages and only return to work when they need more money; while the 'economic man' maintained the assumption that wages can be used to encourage workers to work better (Peach & Wren, 1992).

1944 as cited in Peach & Wren, 1992; Baumgart and Neuhauser, 2009; Mousa and Lemak, 2009).

From the above, it can be seen that the key difference for modern incentive schemes is that these schemes are output based and do not specify the way work should be done, which was the core of Taylor's "science" and the basis for breaking down collective "soldiering" or output restriction. Thereafter, social scientists started to investigate whether monetary incentives alone improved productivity or not, on the basis that individuals work within groups. In this sense, it was argued that 'social comparison' of incentives could shape workers' productivity, as they compared themselves with other workers, even where "soldiering" was not the case (Williams, 1920 as cited in Peach & Wren, 1992). In other words, individuals evaluate themselves relative to others and financial incentives may not positively motivate workers, as this is dependent on how they see themselves relative to their co-workers. The social science era also contributed to raising awareness of other influential factors in improving workers' motivation. Hence, productivity issues raised throughout the Hawthorne Studies (Wren, 2004) were argued to underline the notion of 'social man' in addition to that of 'economic man' (Peach & Wren, 1992).

Thus, it can be inferred from the above examples that the philosophical background of the payment systems, criteria for performance and targets of payment changed significantly, and seem to have varied, depending on different economic contexts and situations. It can also be seen that the idea of P4P was developed from various perspectives, including economics and psychology, which reflects the fact that managing performance is a complex task.

In terms of its development in the healthcare context, P4P was initiated in the US around 1970, when Walter McClure, an American health policy activist, introduced his 'Buy Right' strategy. According to this strategy, health purchasers can enhance competitive performance among providers by increasing patient volume and paying more money to doctors and hospitals who provide high quality and efficient services and penalising those who do not (Millenson, 1999). This

induced health providers to improve their performance and reduce the cost of healthcare delivery (Scanlon, 2005). In the UK, despite the fact that P4P had been brought into the realm of public policy in the parliamentary debate on teachers' performance in 1861 (Wragg et al., 2004), early P4P initiatives in healthcare were only introduced in 1986, through 'Good Practice Allowance', which provoked refusal from the British Medical Association (BMA), on the ground that all GP practices offered 'good' quality of services and impossible to measure quality of health care (McDonald et al., 2009; Roland, 2011).

P4P really gained its reputation after 2001, when the Institute of Medicine (an American non-profit national academy) published two reports (in 1999 and 2001) about quality and patient safety problems (Swayne, 2005; Pentecost, 2006; Schatz et al., 2007). These reports argued that underperforming health systems might expose patients to preventable risks. Accordingly, policy makers concluded that the existing medical approaches to treatment were inadequate and significant improvements were required to remedy the situation. As part of this analysis, the misalignment between financial rewards and quality of care was highlighted as a major reason for poor performance (Kohn, Corrigan and Donaldson, 2000; Corrigan et al., 2001). While these reports triggered a wider interest in P4P worldwide, in the UK, such attempts had started a decade earlier.

In 1990, the UK Government introduced clinical audit schemes, which were used to reward practices financially based on their achievements in improving childhood immunisation and cervical cancer screening (Baker and Middleton, 2003; Alshamsan et al., 2010). This initiative was considered successful in improving the performance of physicians (Hearnshaw, Baker and Cooper, 1998; Seddon et al., 2001; Roland, 2011). Ten years later, after a failed first attempt to link quality of care and financial incentives, introduced in 1986, the government engaged in another initiative in early 2000. This time, the BMA showed a great deal of enthusiasm for the scheme, which was taken as evidence of a cultural change in the healthcare system in the UK (Roland, 2011). Specifically, it can be argued that clinical audits, initiated in the early 1990s, introduced new

experiences that built up into a habit of clinical scrutiny in the form of audit. This enabled various parties to learn and open up their perspective on clinical care improvements. However, there were also policy considerations that induced the UK Government to focus on the role of financial incentives in improving the quality of health services. The following section discusses different aspects of the rise of P4P in the UK, and more specifically that of QOF.

2.3. PAY FOR PERFORMANCE IN THE UNITED KINGDOM

In managed health care systems, such as the UK, general practitioners (GPs) play a key role as the first-line contact for patients dealing with the health system (Scott, 2000). The work of GPs is centred on understanding a patient's medical history, screening out-patients and referring them to secondary care services, if they decide that the cases need further clinical treatment and/or investigation (Day and Klein, 1986; Scott, 2000). This is said to reduce the possibilities of unnecessary clinical treatments, which can in turn reduce healthcare expenses (Franks, Clancy and Nutting, 1992; Starfield, 1994; Scott, 2000). This understanding, along with other factors *(See Page 12),* helped in the process whereby the policy makers have encouraged the use of direct and indirect financial incentives to improve the productivity of GPs, and as a formal way of measuring the quality of GPs' services (Marshall and Harrison, 2005; Mannion and Davies, 2008a; Mannion and Davies, 2008b).

2.3.1. POLICY IMPERATIVES FOR THE *NEW* GMS CONTRACT: PUBLIC HEALTH, PRACTICE PERFORMANCE, OR CONTROL DEVICE?

With more than 1.6 million employees across the country (Parkin, 2009), the NHS has become a major target for change, which has made it a 'laboratory of experimentation in changing work practice' (Walby & Greenwell, 2004). Since the 1970s, the UK Government has recognised the need to make administrative changes, in order to maintain good quality of service and to ensure that public health needs are met (DHSS, 1972; DoH, 1997).

While considerations relating to public health seem to dominate discussions amongst academics, the potential conflict of interests between the government agendas and professional organisations should not be neglected. Thus, although the consensus on improving healthcare performance has grown, the subsequent healthcare policies imposed by the Government on primary care organisations were perceived to involve a political agenda of controlling GPs. This interpretation has been applied in particular to the introduction of various medical contracts for primary care (Pollock, 2004).

During Thatcher's premiership, various initiatives were launched for managing the quality of services offered by primary care organisations. In 1986, the Government published a green paper entitled '*Primary Health Care: an Agenda for Discussion*' which demonstrated its intention to pursue efficiency, on the basis of market and managerial strategies (HMSO, 1987). While GPs were expected to be more sensitive to customer preferences and patients were encouraged to choose their doctors (market strategies), this proposal also aimed to increase control over the managerial activities of GPs. Therefore, it attracted strong opposition from the BMA (Klein, 2010).

The government subsequently published a white paper entitled '*Working for Patients*' (HMSO, 1989; Klein, 2010). One of the key aims of this paper was to:

> *''...help the family doctor improve his service to patients, large GP practices will be able to apply for their own budgets to obtain a defined range of services direct from hospitals. Again, in the interests of a better service to the patient, GPs will be encouraged to compete for patients by offering better services. And it will be easier for patients to choose (and change) their own GP as they wish'' (HMSO, 1989).*

While the negotiation on a new GP contract with the BMA stalled, this paper led to the creation of a new internal market which separated healthcare providers and buyers (Propper, Wilson and Söderlund, 1998). This market entailed an expectation that healthcare organisations would be managed as businesses, in a way that they could sell their services at the contract price to purchasers. This idea was inspired by the incentive models prevalent among US Health Maintenance

Organisations (HMOs), which encouraged competition between health providers in order to be more competitive for customers[2] (Paton, 1992).

In the early 1990s, the NHS introduced its fundholding scheme to incentivise GPs. The main aim of the GP fundholding experiment was to enable health professionals (in this case, GPs) to have more control over negotiating patients' referrals with other health providers, such as hospitals and community health providers (Greener and Mannion, 2006). GP fundholders had the opportunity to purchase secondary care contracts and to decide "which providers, services and patients would benefit from their funds and keep any surpluses that they generated" (Kay, 2002). The scheme was thought to make GPs more interested in the financial implications of their prescriptions and referrals (Stoker, 1990; Greener and Mannion, 2006)[3]. Under this contract, GPs were rewarded individually according to their population coverage and claims for the work performed (Independent Contractors) (Leese and Petchey, 2003; NAO, 2008). Consequently, GPs used to offer services to the NHS and worked alone or in small group practices (Leese and Petchey, 2003). Their rewards were based on the GP's rather than the patients' needs (NAO, 2008). Apart from its financial impact on the fundholders, the GP fundholding experiment was criticised for creating a 'two-tier' structure, in which hospitals served patients of GP fundholders more quickly than patients of non-fundholders (Pollock, 2004).

---

[2] In the American case, the idea of the competitive market system in healthcare was a response to 'weak and politically subverted planning in the 1970s'. The competitive approach itself was initiated around 1980 in the US (Paton, 1992).

[3] Studies reported different outcomes in assessing the effectiveness of the scheme. GP fundholders were argued to be more responsive in terms of reducing waiting times for secondary care and getting more involved in the process of commissioning (Greener and Mannion, 2008); on the other hand, patients who were served by fundholding practices tend to be less satisfied compared to their counterparts in non-fundholding practices (Dusheiko et al., 2003). Patients reported that GP fundholders seemed more concerned about keeping costs down, rather than about their health. Thus, patients might experience the change as a factor in a declining health service (Dusheiko et al., 2003). At this point, it seemed that the implementation of fundholding had become extremely problematic. Fundholders could not act as "ruthless purchasers" as the choice of health care provider was often limited, if not nonexistent. Moreover, fundholding practices were to some extent considered as a factor in both the threat to and the opportunity for health policy related to budget spending (Lliffe and Freudenstein, 1994). The literature also notes that the perceived failure of this scheme was related to a design which was not pilot tested, despite authoritative advice, due to worries about potential rejections from the profession, as well as not being based on reliable data representing the potential consequences of the scheme (Lliffe and Freudenstein, 1994; Greener and Mannion, 2008).

An early type of P4P scheme, which was initiated alongside fundholding, was related to the initiation of cervical cancer screening (Baker and Middleton, 2003). The P4P scheme was limited as it was only focused on incentivising GPs to conduct childhood immunisation and cervical cancer screening. A reward was given to those achieving the target level of 80%, which was calculated from the population base of the GP practice.

During Blair's administration, the idea of the internal market was changed into a more integrated system which was 'based on partnership and driven by performance' (DoH, 1997)[4][5]. Instead of abolishing the limited mechanism of the internal market, as offered by Conservative Government, it became a mandatory collaboration between purchasers and providers, under the creation of Primary Care Groups/Trusts (Denham, 2003; Pollock, 2004). Along the same lines, while fundholding was cleared from the system, GPs retained, or even expanded, their primary roles as purchasers (Alcock, 2002; Klein, 2010).

While there were similarities between the initiatives offered in 1990 under the Conservative Government and the new Labour initiative, the BMA seemed to show greater interest in supporting the new Labour programmes (Klein, 2010; Roland, 2011). This was evident when the white paper entitled '*The New NHS – Modern, Dependable*' was issued (DoH, 1997). The paper suggested that the former medical contract (the old GMS) was unable to tackle under-provision of primary care in deprived areas of England (Leese and Petchey, 2003). To overcome the shortage of primary health care provision, the Personal Medical Services (PMS) contract was introduced in pilot form during 1998, as an alternative to the national scheme (GMS) (Smith and York, 2004).

---

[4] The separation between purchaser and provider aims to provide better choices for patients, by allowing new entrants to the healthcare market, reflecting a pluralistic model of healthcare provision. This means that various providers are given the opportunity to offer healthcare services for patients. Current reforms are also aimed at pursuing better organisational performance, through practice-based commissioning or payment by result, and to enable greater autonomy at organisational level (DoH, 2004a, 2005a, 2006; Peckham, 2007).

[5] This period also continued a sense of privatisation of primary care practices, by the induction of Local Improvement Finance Trust (LIFT), which was a Private Finance Initiative PFI scheme for practice premises. This initiative enabled GP practices to work with private companies in refurbishing their premises (Pollock, 2004).

Unlike the old GMS, the PMS contract based payment on negotiations between the Primary Care Trust (PCT) and GP practices (Campbell et al., 2005). Its implementation came in two 'waves'. During the first wave, negotiations were conducted between health authorities and practices, while during the second wave this was to take place between practices and PCTs (DoH, 1997). Payment was to consist of a lump-sum for the services which were covered under the GMS and additional incentives for the services that they provided to special patients groups and services provided according to local circumstances (Gosden et al., 2002; NAO, 2008). The PMS provides more flexibility for designing creative procedures to offer services that meet local needs. It allows individual and group practices, as well as PCTs and community trusts, to negotiate for arranging service provision, such as salaried GPs and the role of nurses (DoH, 2002).

In conducting these changes, the government came to believe that a comprehensive transformation of various aspects of the system was required. This was eventually stated in the NHS Plan – A Progress Report:

> *''This requires a fundamental rethink of the way we work together throughout the service to really deliver what people want. In this way the success of The NHS Plan rests quite literally on the people working in the NHS and social services. Money alone will not solve the problems. It will not make services patient-centred. It will not create change in every health community. Only people can do that. To meet the vision outlined in The NHS Plan, we will all have to embrace change on a massive scale. This means no less than a fundamental shift in our working practices and attitudes, some of which have remained unchanged since 194''8(NHS-Modernisation-Board, 2002).*

Subsequently, the Department of Health emphasised the importance of increasing the role of primary care while at the same time focusing on skill improvement for staff. This was tied to the observation that there was an increasing number of people with chronic conditions requiring care, with 80% of consultation time in primary care organisations spent on chronic diseases (DoH, 2005b; Wilson, Buck

and Ham, 2005; Coulter, 2006). As a result, the government replaced the old GMS with the *new* GMS.

2.3.2. NEW GENERAL MEDICAL SERVICES (*N*GMS) CONTRACT

Replacing the old GMS contract, in April 2004, the NHS launched a new GP contract, the new General Medical Services (*n*GMS), which has changed the responsibilities and relationship between PCTs and GPs. Although GP practices and other health care providers act as 'independent contractors' within the NHS, the implementation of this new contract places PCTs in charge of designing services that can be performed in accordance with the needs of the local population (NAO, 2008). This means that even GPs still work as independent contractors, under the *n*GMS the NHS tries to control the authority and monitor the GP practices and enforce them to structural changes through the PCTs (Grant et al., 2009).

Under the *n*GMS contract, NHS spending on primary care increased from £5.8 billion in 2003/04 to £7.7 billion in 2005/06. Consequently, the contract brought extra funding to GP practices. The extra funds were designed to improve GP recruitment and help with retention, especially in under-doctored and deprived areas, as well as to increase expenditure on Information Technology, premises and pensions (DoH, 2004b; NAO, 2008). In addition to the extra funding, the *n*GMS contract reallocates practice payments for the services that they would have provided under the old contract, as shown in Table 1 below (GPC-BMA, 2004; NAO, 2008).

Table 1. Summary of Comparison between Old GMS and New GMS

The Contract Items	Old General Medical Services Contract	New General Medical Services Contract
	Individual GP	**GP Practices**
Funding for core services	Apart from Basic Practice Allowance, each individual GP is given a fee per patient and type of health service delivered.	The funding for healthcare essential services is based on "global sum" which weighs the demographic structure of population, list turnover, additional needs and unavoidable healthcare service delivery cost in the calculation.
Service delivery	GPs are allowed to make claims for limited services only.	Practices are offered flexible structure of service delivery, which may enable them to customise their additional services to particular patient needs.
Out of hours	Out of hours is obligatory; but may be delegated to other healthcare providers.	Enhancing the balance between work and life, out-of-hours service is not compulsory and arranged under separate contract covering healthcare service delivery outside core hours of service.
Quality rewards	Rewards are offered for quality service in some areas. Former schemes include 'Investing in Primary Care'.	Rewards are distributed through the QOF scheme that incentivises practices regarding their ability to achieve predefined quality targets of healthcare service performance.
Staffing	There is no funding for developing staff other than GPs.	The *n*GMS provides reward for services delivered by other healthcare professionals apart from GPs. It also enables other expenditures on IT, premises, and pensions, and it addresses the importance of seniority and the development of different skills mix.

Source: Department of Health (NAO, 2008)

As a part of the *new* GMS, the Department of Health introduced the Quality and Outcomes Framework (QOF), as a national P4P scheme aiming to ensure high 'clinical and organisational quality', with particular emphasis on managing chronic diseases (DoH, 2003). The QOF scheme is meant to encourage the improvement of quality of care through promoting accountability (evidence-based) and simultaneously endorsing cost-efficiency (Coutts and Thornhill, 2009).

2.3.3. THE QUALITY AND OUTCOMES FRAMEWORK

QOF is considered to be a key feature of the *n*GMS, it aligns up to 25% of GP practice's income with the quality of service they provide (Campbell & Lester, 2011). This scheme involves the creation of an evidence-based quality and outcomes framework, as well as trying to improve the quality of the patient experience and comply with professional practice (DoH, 2003). QOF functions as a means for measuring and incentivising the quality of care delivered to patients.

Under this scheme, data related to practices' performance will be available to PCTs, Government and patients (NHS_The_Information_Centre, 2005).

Along with the evidence-based medicine and global interest factors towards P4P that were discussed earlier (Kozinets et al., 1999; Miller, 2005; Rosenthal et al., 2005; Sachdeva, 2007; Landon and Normand, 2008; Mannion and Davies, 2008a), the UK also experienced a growing concern about the variation in quality of care provided; so that the Government perceived a need to reduce or eliminate the gaps (Roland, 2011). Another concern which was raised related to the funding available for primary care. This led to the announcement of the Government's intention to increase funding for the NHS, to reach the average European health budget.

Data show that in the UK spending on health care as a percentage of GDP increased to 9.4% in 2006, bringing UK spending close to the average in Europe, compared to 7.1% in 2000 and 8.6% in 2004 (Office_of_Health_Economics, 2007). The NHS also witnessed a huge and extraordinary increase in public spending rising from £43.9bn in 2000/1 to £84.3bn in 2006/7, representing an increase of 92.3% in cash terms and over 50% in real terms (DoH, 2007). The UK Government was willing to invest huge amounts of money (up to 25% of primary care budget) to support this quality improvement scheme (Roland, 2011).

By doing so, healthcare professionals expected that a significant portion would go into the primary care system. While there was a continuing trend of an increasing government budget for the NHS, the proportion it spent on primary care was claimed to be less significant than that allocated to hospitals. For a proxy illustration, data on PCT budgets for primary, hospital and other care showed that hospitals had been allocated 60% more than primary care (Featherstone and Evans, 2010)[6]. Yet, GPs also realised that increased investment meant that more work was expected in exchange (Roland, 2011).

---

[6]Prior to this period there was no clear data on what proportion the NHS spent on primary care. Featherstone and Evans use data from 2006/07 PCT returns to provide an illustration of the proportion of PCT funding that went into hospitals (76.35%) compared to primary care (11.3%). The data were collected from various sources, reflecting the complexities and 'impenetrable nature of NHS cost and account'. Although this data was 2006-2007 basis, it can be used as a reflection

The QOF framework employs a complex performance measurement system (Coutts and Thornhill, 2009), in which performance is measured against four domains; each domain consists of a well-defined set of measures of achievement, known as indicators. Indicators then translate to points with different weights and each point is worth £124.60[7] (NHS_PCC, 2009)[8]. The performance of GP practices is assessed through their QOF points, whereby a higher score reflects higher quality of care and hence, a greater amount of financial reward. However, workload and disease prevalence are also used to adjust the final payment for the practices. Part of this payment is paid in advance, particularly for high performing practices, to encourage them to invest in the practices' infrastructures (NHS_The_Information_Centre, 2009).

The four QOF domains are weighted with a total of 1,000 points; 697 of them are related to the clinical domain. The four domains and their related indicators are as follows (NHS_The_Information_Centre, 2009):

1. *Clinical domain* (maximum of 697 points). This deals with the main features of healthcare practices, containing 86 indicators of 20 major clinical diseases that are believed to be encountered by healthcare professionals and GPs. The clinical domain acts as the leading part of the quality framework (Van den Heuvel et al., 2010).

2. *Organisational domain* (maximum of 167.5 points). This provides rewards for "good organisational and human resource practices" and comprises 36 indicators for records and information; information for patients; education and training; practice management and medicine management.

---

on the situation, in which even there was claimed an increased funding, the portion was still low even after QOF.

[7] Until 2006, each point was worth £75 (DoH, 2003).

[8] Following its inception in 2004, QOF was reviewed and changed in 2006 and 2009 (Leech, 2008). The changes were mainly in quality indicators and scores assigned to indicators. Further changes were planned for 2010 some of which were about inclusion of indicators for new diseases and illnesses (NICE, 2010).

3. *Patient care experience domain* (maximum of 91.5 points). Three indicators included in this domain deal with the length of consultation and patient surveys.

4. *Additional services domain.* This covers nine indicators for four additional service areas, such as cervical cancer screening, child health surveillance, maternity services and contraceptive services.

In its first application, QOF also included a reward for quality measure, which covered three types of payment: a holistic care payment, a quality practice payment and an access bonus (NHS_The_Information_Centre, 2005). Holistic care payments measured the achievements of healthcare providers across the clinical domain. The maximum points for this measure were 100 (9.5% of the total). Quality practice payments measured general achievements in the organisational areas, patient experiences and additional services (except clinical domain) and was scored out of a maximum of 30 points (2.9% of the total). The access bonus rewarded the target level achievement in terms of patient access to clinical care. These points count for 4.8% of the total points available. Table 2 below represents the development of the four domains over time, since their inception in 2004, up to the expected changes in QOF 2009/2010.

Table 2. Changes in the Quality and Outcomes Frameworks

QOF Dimensions	2004-2006	2006-2008	2008-2009	2009-2010
DOMAINS				
Clinical	550	655	650	697
Organisational	184	181	167.5	167.5
Patient Experience	100	108	146.5	91.5
Additional Services	36	36	36	44
DEPTH OF QUALITY MEASURES				
Quality Practice Payment	30			
Holistic Care payment	100	20		
Access Bonus	50			
Maximum QOF points	1050	1000	1000	1000
DISEASE AREAS	**10**	**19**	**19**	**20**

Source: (NAO, 2008; NHS_PCC, 2009; NHS_The_Information_Centre, 2010)

The QOF score can serve as a tool for benchmarking quality of care, either within practices for different years, or between practices. Since 2006, the maximum QOF points has remained at 1,000 points (NHS_The_Information_Centre, 2009).

In the clinical domain, there are three different types of indicators, structure, process and outcome indicators (NHS_PCC, 2009). Structure indicators relate to whether a certain register of patient exists in the practice. Process indicators represent whether appropriate treatments or interventions are conducted, while outcome indicators relate to the extent that interventions have improved the health of patients. Meanwhile, outcome measures focus on intermediate patient health outcomes (Roland, 2004; NHS_PCC, 2009). These indicators are mainly process oriented, based on the assumption that actual health outcomes are both difficult and need time to be measured (Roland, 2004; Doran, 2008).

In measuring indicators, this framework sets thresholds which comprise lower and upper limits (DoH, 2003; NHS_PCC, 2009). For the 2004 QOF scheme, some of the lower level thresholds were less than 40%. However, relying on the achievement data for 2005, it seemed that most participants were able to attain this level or above (Doran et al., 2008a). Consequently, all thresholds lower than 40% were raised up to 40%. The upper thresholds of most indicators had a limit of 90%; for the majority of indicators the upper thresholds remain at this level (Campbell & Lester, 2011).

Since its launch, QOF has been subjected to both major (2009) and minor (2006) changes to its indicators and measurement. Table 3, presents the changes to each dimension over time, showing that the clinical domain remains the main indicator for QOF with an increasing allocation of points for the six years of QOF implementation. While additional service shows a slight increase from its original 2004 scheme, organisational and patient experience domains experienced a small decrease in the number of points allocated (BMA, 2009; Campbell & Lester, 2011).

Table 3. QOF Scheme

QOF Dimensions	2004-2006	2006-2008	2008-2009	2009-2010
DOMAINS				
Clinical	550 (52.4%)	655 (65.5%)	650 (65.5%)	Additional points from reallocation (62 points) (71.2%)
Organizational	184 (17.5%)	181 (18.1%)	167.5 (16.75%)	167.5 (16.75%)
Patient Experience	100 (9.5%)	108 (10.8%)	146.5 (14.65%)	72 points are removed to be reallocated into other areas (7.45%)
Additional Services	36 (3.4%)	36 (3.6%)	36 (3.6%)	Additional points from reallocation (10 points) (4.6%)
DEPTH OF QUALITY MEASURES				
Quality Practice Payment	30 (9.5%)			
Holistic care payment	100 (2.9%)	20 (2.0%)		
Access Bonus	50 (4.8%)			
Maximum QOF points	1050	1000	1000	1000
DISEASE AREAS	**10**	**19**	**19**	**19**

Source: Figure was developed based on data/information adopted from (NAO, 2008; NHS_PCC, 2009; BMA, 2009) .

Policy process involved in such changes was also altered. Between 2005 and 2009, changes in QOF measurement and indicators were made through expert panels, which involved primary care academics and clinicians interested in particular domains. While their ideas were prioritised, the panels were to comprehend the story behind the suggestion as well as the reason of why some indicators may not be feasible or suitable to be implemented. Reviews by both GP clinical system experts and patient organisations followed the process to ensure indicators were achievable prior to final negotiation between the Department of Health and the BMA (BMA, 2009; Campbell & Lester, 2011).

However, this process has changed again since April 2009. The process of evaluating and establishing indicators is now led by the National Institute for Health and Clinical Excellence (NICE). NICE has the status of an independent and credible institution, therefore this alteration is expected to bring a more transparent and objective process in developing indicators. In accordance with its expertise, the process led by NICE is more focused on the development of clinical

indicators. While the review for indicator feasibility is similar to the previous policy process, with the involvement of clinical experts, the new NICE-led mechanism involves real-situation testing by piloting particular indicators in practices representing different settings across country (Campbell & Lester, 2011).

2.3.3.2. THE EXCEPTION REPORTING MECHANISM

Rather different from previous medical contracts, the *n*GMS includes the concept of exception reporting. Exception reporting enables practices to systematically remove any patient from the denominator, while still receiving the reward for the services they have performed[9]. This system distinguishes the QOF framework from P4P programmes in other countries and such a system is said to be required, especially in the absence of a Case-Mix adjustment mechanism (Martin et al., 2010). The rate of overall exception in England was 5.83% in 2006/07 and 5.26% in 2007/08 (NHS_The_Information_Centre, 2008). According to NHS Primary Care Commissioning, the purpose of exception reporting, as described in the 2003 contract documentation is:

> *''....to allow practices to pursue the quality improvement agenda and not be penalised, where, for example, patients do not attend for review, or where a medication cannot be prescribed due to a contraindication or side-effect''(NHS_PCC, 2009).*

Exception reporting criteria can be applied to indicators in the clinical domain and to one cervical screening indicator, which is under the additional services domain. Patients on the disease register would be included in the indicator denominator. However, to avoid financial penalties, a practice can make exceptions to the patients in the indicator denominator, if patients meet one of the exception criteria. For example, these criteria can include patients who (1) have previously refused to attend an interview on at least three occasions during the preceding 12

---

[9] Exclusions: patients on a clinical register but excluded from an indicator denominator. For example, an indicator may include patient of a specific age group, patients with a specific status or patients with a certain duration of diagnosis.

months; (2) have terminal illness or extreme frailty; and (3) do not take medication for clinical reasons, such as those who suffer from drug allergies (NHS_The_Information_Centre, 2006; NHS-Employers and BMA, 2007). Patients can be excluded in cases where the inclusion criteria do not fit them. Nevertheless, patients should be carefully treated, even if they are exempted from the denominator (NHS_The_Information_Centre, 2006).

During the policy negotiation process, the government observed that this mechanism could lead to improper exclusion of patients for financial gain (Roland, 2011). There is also a body of evidence suggesting that the exception system may encourage practitioners to neglect the more difficult indicators (NHS_The_Information_Centre, 2006; NHS-Employers and BMA, 2007).

There is a possibility that some GP practices might inappropriately use exception reporting to score high QOF points (Doran et al., 2006). Fleetcroft et al (2008) argue that setting up certain levels of threshold (e.g., less than 100), combined with exception reporting, may lead to a performance gap. This means that there will be a negative possibility, in which GP practices may intentionally exclude some patients from the performance report (Greene and Nash, 2008; Gravelle, Sutton and Ma, 2009).

2.3.3.3. THE LEVEL OF GP PARTICIPATION TOWARD QOF AND ACHIEVEMENTS

Each GP practice works under various medical contracts with the government and these contracts form the practice's income [10]. This means that the services provided by each practice are paid through different contracts and the same

---

[10] There are four contracting options for GP practices:
1) *n*GMS:- Practices contract with their local PCTs on nationally agreed terms;
2) PMS:- Practices negotiate and contract with their local PCTs on a locally agreed terms, about one third of GP practices in England hold this contract;
3) Alternative Provider Medical Services (APMS):-Private health care companies can provide GP services, a small number of practices work under this contract;
4) Primary Care Trust Medical Services (PCTMS):- This contract allows local PCTs to run and manage practices directly (see the website of BMA: http://www.bma.org.uk/press_centre/pressgps.jsp; NAO, 2008).

practice might have different contracts. Figure 1, below, shows that by February 2008, 62% of total GPs services in England were covered by *n*GMS, while the rest of the services were under alternative payment schemes (NAO, 2008). Altogether, 99.8% of GP practices in England are involved in QOF and consider it as a significant source of income (Lester and Majeed, 2008; Van den Heuvel et al., 2010). This means, most practices under Personal Medical Services are also involved in the QOF scheme (NHS_The_Information_Centre, 2006).

Figure 1. Proportion of GPs Participation
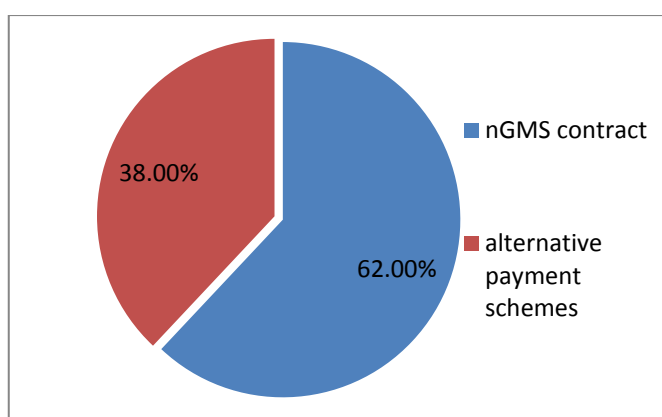
Source: (NAO, 2008)

Regarding the level of QOF achievement, most GPs appear to have been able to achieve good quality of services, fulfilling more than 90% of QOF targets. Figure 2 shows that the average achievement was relatively high, as it reached 96.80% by 2007/2008 (NAO, 2008; Van den Heuvel et al., 2010).

Figure 2. Level of QOF Target Achievement by GPs (England)
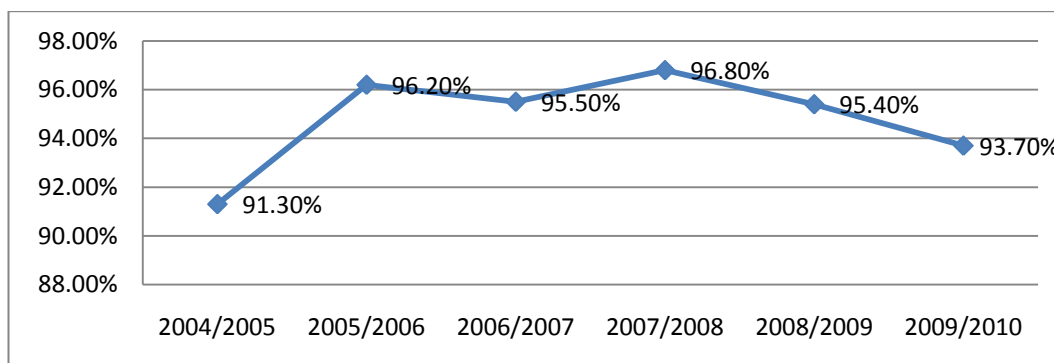
Source: (NAO, 2008; NHS_The_Information_Centre, 2010)

From the figure above, we can see also that the achievement level decreased slightly in 2006/2007, but increased again in the 2007/2008 report. This slight downturn could be a response to the amendment of the thresholds conducted in 2006. Although there was a downturn, the achievement level was still very high (reaching 95.5%) and kept the increasing trend the following year (2007/2008). For the years of 2008/2009 and 2009/2010, changes initiated in the Patient Experience domain were likely to be the cause of the significant decrease in average achievement (NHS_The_Information_Centre, 2010).

Finally, the high achievement in QOF points since its inception in 2004 raised the question of whether the QOF scheme really did improve the quality of healthcare or merely encouraged reporting and 'tick boxing' and/or manipulating of data (Johnston and Fellow, 2005; Mannion and Davies, 2008b). Another doubtful issue is whether high QOF score attainment was obtained because the NHS had set very easy achievement targets, especially in the first year (Epstein, 2006; Gravelle, Sutton and Ma, 2007).

2.4. CONCLUSION

Despite available alternatives the *n*GMS contract records a high level of participation from GPs. The key feature of the new contract is the QOF framework. QOF links around 25% of a GP practice's income with the quality of care they deliver compared against 134 predefined indicators. It developed within the primary healthcare system, based on the internal market, evidence-based medicine, competition and controlling GP services.

QOF was introduced in the UK in an effort to improve the performance of GP practices by offering additional funding. It focuses on four domains, clinical, organisational, patient experience and additional domains. The clinical domain is considered critical for determining the quality of healthcare services provided by GP practices. The percentage of points attributed to the clinical domain against the total score in QOF ranges from 550 (2004) up to 697 (2009) points. The change in the number of points reflects adjustments made to the indicators.

Since its inception in 2004, the QOF scheme has been amended two times. By relying as much as possible on the best available evidence in the process of establishing indicators, changes have been made by altering, reallocating and adding indicators and the number of points attached to them, as well as increasing the thresholds (particularly lower thresholds).

CHAPTER 3

A SYSTEMATIC REVIEW OF EVIDENCE:

THE IMPACT OF PAY FOR PERFORMANCE IN PRIMARY CARE ORGANISATIONS

3.1. INTRODUCTION

This chapter presents a review of empirical evidence on the efficacy of P4P in the health sector, with a focus on the primary care contexts. The chapter begins by discussing previous reviews of evidence. Further aspects of the reviews are organised according to key themes, which emerged in the review processes.

3.2. PREVIOUS REVIEWS

A review of the literature was able to identify sixteen previous reviews of P4P in healthcare. The reviews only included English language articles published in peer reviewed journals. A summary of previous reviews is presented in Table 4 below.

Table 4. Summary of Previous Reviews

No	Studies	Context	Type of Incentives	Specific Issues	Findings and Conclusions
1.	(Achat, McIntyre and Burgess, 1999)	Physician level	Financial incentives	Immunisation uptake	Findings showed that there were increases in both primary immunisations and preschool boosters. Both financial and non-financial incentives may have contributed to the improvement. In order to enhance effective implementation, programme design should include collaboration between key players, as well as customisation to fit the nature of the population.
2.	(Alshamsan et al., 2010)	Primary care	QOF	Inequalities of care	Some issues of inequality, especially related to age, gender and ethnic inequalities still exist. In deprived areas, although QOF was closely associated with ensuring equalities between prosperous and deprived areas, evidence was found that QOF might not be the only cause, as the UK Government had engaged in such inequalities reduction programmes a decade before QOF. It is argued that the focus of design should be directed toward eliminating inequalities and improving health outcomes.
3.	(Armour et al., 2001)	Physician level	financial incentives	Explicit financial incentives	There is a lack of research addressing the issue of explicit financial incentives given to physicians. The findings were mixed, with some studies stating positive improvements and others maintaining they have no impact on quality.
4.	(Chien et al., 2007)	Primary care	US P4P	Public Reporting and Ethnic Disparities	Certain ethnic groups (whites) were noted to receive particular healthcare treatment in all US states, especially in New York, after the P4P programme was implemented.
5.	(Christianson, Leatherman and Sutherland, 2007)[11]	Primary and secondary care	Financial Incentives	Effectiveness of efforts cost and utilisation	The findings were mixed, with little evidence on the positive impact of P4P on quality. Furthermore, most of the literature noted that its implementation was complemented with other quality efforts, resulting in difficulties in assessing its actual effectiveness.
6.	(Dixon and Khachatryan, 2010)	Primary care	QOF	Public Health impact	Narrowing the gap between practices servicing deprived and affluent areas was observed. Yet, QOF impact on health outcomes was less clear.
7.	(Dudley et al., 2004)	Primary and secondary care	Financial Incentives	Strategies to support Quality	The study showed that it was possible to implement quality based payments without any significant risk, especially related to an institution's good will or

---

[11] This review published in The Health Foundation/ London; which is an independent charity working organisation.

No	Studies	Context	Type of Incentives	Specific Issues	Findings and Conclusions
				Based Purchasing programme	financial condition. It was noted that a positive effect took place, especially when the payment was not attached as a bonus, but as an addition to the fee-for-service to the organisations. More research was expected to strengthen evidence.
8.	(Glickman et al., 2008)	Emergency care in hospital	P4P	Measurement designs	Some measurement metrics (5/9) did not meet ACC/AHA[12] selection criteria for measurement. Some other metrics were questioned for cost effectiveness. It was suggested that better designs for measurement should be directed toward the nature of emergency care to better reflect its quality.
9.	(Greene and Nash, 2009)	No specific context	P4P	Description, outcomes, cost analysis, perceptions, arguments against and supports for P4P	While the effectiveness of P4P on quality of care tended to be positive, the evidence of its cost effectiveness should be strengthened. Although some unintended consequences existed, P4P was considered to have the potential impact to improve various aspects of the quality of healthcare, including healthcare professional-patient relationships and reducing expenses.
10.	(Peckham and Wallace, 2010)	Primary care	P4P	Quality of care	Limited evidence on how P4P affects quality of care. Incentivised processes were improved, yet, its positive impacts on physicians' behaviour and health outcomes were less plausible.
11.	(Petersen et al., 2006)	Primary and secondary care	P4P	Quality of care	Authors found unintended consequences of P4P implementation. Question on the longevity of impact was yet to be explored. The need for sustainable monitoring to ensure effectiveness and avoid unintended consequences was suggested.
12.	(Rosenthal and Frank, 2006)	Primary and secondary care.[13]	US P4P	Quality of care	Little evidence and mixed impact on the effectiveness of P4P in improving the quality of health care.
13.	(Scott and Hall,	Physician level	Financial	GP remuneration	The review found that it was difficult to define an optimal payment system

---

[12]The inclusion criteria used in Glickman et al (2008) were based on the professional associations in the American College of Cardiology (ACC) and American Heart Association (AHA) areas. Those criteria includes (1) the strength of evidence that supports measure inclusion, (2) the clinical relevance of the outcome associated with adherence to the performance measures, (3) the magnitude of the relationship between performance and outcome and (4) the cost-effectiveness of the quality improvement intervention.

[13] Also included other contexts, i.e. industrial, educational and psychology organisations.

No	Studies	Context	Type of Incentives	Specific Issues	Findings and Conclusions
	1995)		Incentive		reflecting the imperative for further research. Most literature did not point out remuneration impacts on patients' health outcomes.
14.	(Steel and Willems, 2010)	Primary care	QOF	Research implication	Despite growing empirical evidence on QOF, its impact on health outcome was still unclear and inconclusive. The importance of high quality research, designed to enlighten policy makers on maximising the implementation of QOF to improve quality and inequality of health care, was suggested.
15.	(Town et al., 2005)	Primary and secondary care	Financial incentive	Preventive care	This review included only literature with randomised trial methods, resulting in lack of empirical evidence on preventive care. The findings show that physicians' behaviour could not be changed with only a small amount of financial reward. To induce the wider effect of behavioural change, it was suggested that 'system-level economic incentives' be imposed.
16.	(Van Herck et al., 2010)	Primary or acute hospital care	P4P	Effects, design choices and context	Broad ranges of result reflecting both strong and weak impacts. It was concluded that those impacts related to how the programmes were designed and the context of implementation.

There was a consensus among all the 16 reviews that incentive schemes had at least some impact on the quality of healthcare provision; yet, the degree of impact varied in different settings and across different units of analysis. Additionally, some reviews asserted the need for richer evidence to assess the effectiveness of financial incentives in general and specific to P4P (Scott and Hall, 1995; Dudley et al., 2004; Peckham and Wallace, 2010; Steel and Willems, 2010).

Several reviews found that along with improving overall healthcare quality, P4P also led to potentially dysfunctional consequences (Rosenthal and Frank, 2006; Christianson, Leatherman and Sutherland, 2007; Peckham and Wallace, 2010). These dysfunctional consequences included adverse selection, gaming, tunnel vision and crowding out the internal motivation (Rosenthal and Frank, 2006; Christianson, Leatherman and Sutherland, 2007; Petersen et al., 2009; Peckham and Wallace, 2010).

Relating these issues to the aim of this research, P4P can potentially improve the performance in delivering healthcare services. Taking this to the sphere of organisational memory, the practices which experience an improvement in their performance may be able to take advantage of learning, by doing better over time. This is expected to strengthen their capacity to be able to conduct changes and respond effectively to such government intervention.

3.3. PROTOCOL OF THE STUDY

This study started by investigating the existing systematic reviews covering research on financial incentives. A broad search strategy and protocol were then used, to ensure that a maximum amount of published evidence which fitted the inclusion criteria would be included. A detailed protocol of the study along with the keywords which were used in the electronic databases are presented in the Appendix 1.

Table 5. Criteria for Inclusion

CRITERIA	DETAILS
Language	Only literature published in the English language was included.
Publication type	Only empirical studies were reviewed.
Setting	Academic research, government studies related to health sector, especially in the context of primary healthcare.
Study Design	All types of study designs and research methods were included.
Period	Papers published between 1970 and 2010.

3.4. RESEARCH REVIEW/DESCRIPTION

The literature collection for this study took place between October 2007 and November 2010. When the last literature update was conducted at the end of October 2010, a total of 115 empirical articles, focusing on the primary health care setting were included.

Figure 3. Process of Literature Inclusion
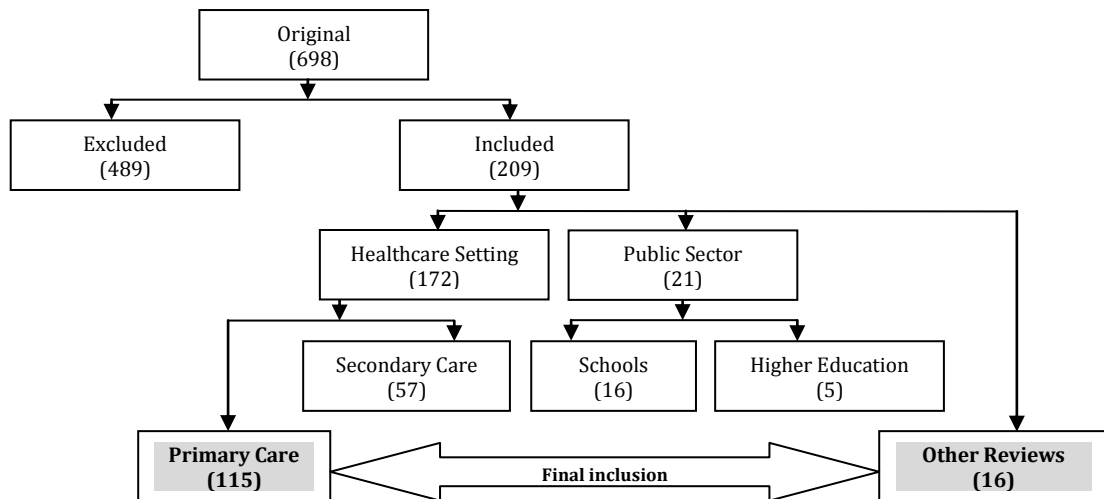
Although the review was designed to include research published between 1970 and 2010, the earliest study found was published in 1998. Moreover, the interest in P4P has grown rapidly since 2001; the highest number of studies was published in the year 2007, with 30 papers (26.08%). Most of the studies were conducted in the UK (60%) or the US (33.91%). Around 76.52% of studies employed quantitative methods, 19.13% qualitative studies and there were 4.35% employed both quantitative and qualitative approaches.

Figure 4. Year of Publication
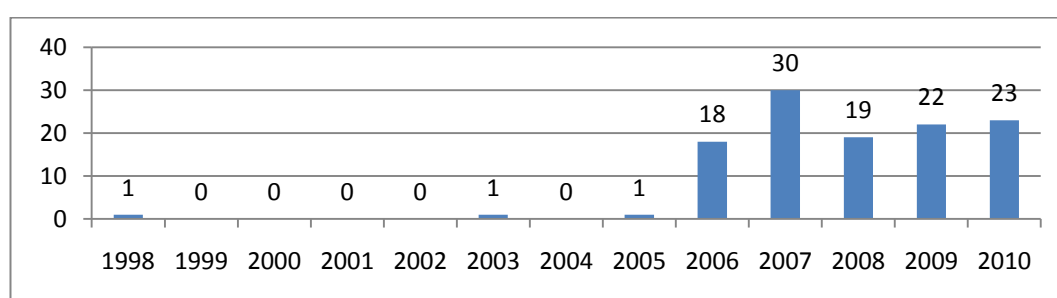
More than 60% of studies focused on process and outcome measures. The research on outcomes mostly employed intermediate outcome measures to assess the impact of P4P on the quality of care. In addition, most P4P schemes worked with absolute thresholds and were targeted toward group/organisation level incentives[14].

3.5. FINDINGS OF P4P AND ITS IMPACT

In this section the findings of the existing empirical studies are discussed and evaluated systematically. The findings are presented under five major themes; these themes are:

- Evidence on the effectiveness of P4P in improving health care quality;

- Evidence on the factors affecting P4P implantation;

- Evidence on unintended consequences;

---

[14] A further description of the empirical studies included in this review, along with the main characteristics of the P4P programmes that have been studied can be found in Appendix 2.

- Impact on organisational behaviour and

- Evidence on organisational memory and change.

3.5.1. EVIDENCE ON THE EFFECTIVENESS OF P4P IN IMPROVING HEALTH CARE QUALITY

This part of the review includes 71 studies. About 90% of these focused on how P4P schemes affected quality indicators, while the rest looked at transfer rate or referral from primary to secondary care (5.71%) and some minor issues (4.28%).

Table 6. Evidence for the Effectiveness of P4P in Improving Quality

Themes	Findings	Studies
Achievement of healthcare quality in targeted chronic diseases	The performance of healthcare organisations improved, but less patient-centred care was reported and there was a move towards a 'biomedical model' which sees the body as a host for disease and therapeutic intervention is directed at the disease, rather than the individual.	(Checkland, McDonald and Harrison, 2007; Checkland et al., 2008; McDonald, Harrison and Checkland, 2008; Checkland and Harrison, 2010; Eleftheriou and Tang, 2010)
	There is an increasing focus on the use of outcome measures and cost-efficiency measures, rather than relying on process measures alone.	(Rosenthal et al., 2007; NAO, 2008; Alabbadi et al., 2010; Lee et al., 2010; Martin et al., 2010; Walker et al., 2010)
	P4P potentially improved the quality of healthcare, yet, the evidence was varied as some studies showed a decline in treatment. In that sense, most research mentioned that the measurement of effectiveness was complex as it involved different factors. Diverse findings on the effectiveness of P4P in reducing inequalities of care in deprived areas, as well as for different ethnic groups. In the UK, the exception reporting system in QOF may contribute to 'conceal' the actual performance. QOF is found to improve the achievement of intermediate outcomes for diabetic patients in all ethnic groups. P4P should be targeted to clinical	(Kouides et al., 1998; Beaulieu and Horrigan, 2005; Rosenthal et al., 2005; Ashworth and Armstrong, 2006; Bokhour et al., 2006; Doran et al., 2006; Hippisley-Cox, Vinogradova and Coupland, 2006; McLean, Sutton and Guthrie, 2006; Sigfried et al., 2006; Bruni, Nobilio and Ugolini, 2009; Campbell et al., 2007; Cutler et al., 2007; Elder et al., 2007; Gilmore et al., 2007; Gulliford et al., 2007; Mandel and Kotagal, 2007; McCarlie, Reid and Brady, 2007; McGovern et al., 2007; Pham et al., 2007; Rosenthal et al., 2007; Steel et al., 2007; Sutton, Ikenwilo and Skatun, 2007; Tahrani et al., 2007; Ashworth, Medina and Morgan, 2008; Campbell, McDonald and Lester, 2008; Cupples et al., 2008; Pearson et al., 2008; Calvert et al., 2009; Campbell, 2009; Campbell et al., 2009; Crawley et al., 2009; Crosson et al., 2009; Falaschetti et al., 2009a; Falaschetti et al., 2009b; Millet et al., 2009; Petersen et al., 2009; Vaghela et al., 2009; Chen et al., 2010a; Chien, Li and Rosenthal, 2010; Chung et al., 2010a; Doran et al., 2010; Eleftheriou and Tang, 2010;

Themes	Findings	Studies
	problems with high impact on overall public health. The generalisation of results on effectiveness may be questioned, as it might work better in one setting than in another.	Elliot-Smith and Morgan, 2010; Fagan et al., 2010; Fleetcroft et al., 2010; Kahn et al., 2010; Kiran et al., 2010; Mabotuwana et al., 2010; Oluwatowoju et al., 2010)
	Higher spending did not necessarily result in higher health outcomes. Level of compliance is high, but unsure about the outcomes.	(Fisher, 2006; Williams and Lusignan, 2006; Coleman, Reiter and Fulwiler, 2007; Crosson et al., 2009; Coleman, 2010; Lee et al., 2010)
Transferring rate (referral) from primary to secondary care	For referral rate and/or admission to hospital, findings were varied. There was no strong evidence to support that P4P could reduce the hospitalisation rate. Some demographic characteristics were associated with referral rates.	(Srirangalingam et al., 2006; Bottle et al., 2007; Bruni, Nobilio and Ugolini, 2009; Downing et al., 2007; Chen et al., 2010b; Lee et al., 2010)
Other issues	Higher prevalence was reported by practices which were previously above the upper threshold. Meanwhile, higher exception reporting was more common by those below upper threshold than those above the upper threshold.	(Sutton and McLean, 2006; Gravelle, Sutton and Ma, 2007, 2009)
	Network performance is also improved.	(Levin-Scherz, DeVita and Timbie, 2006; Mandel and Kotagal, 2007)
	The prescription for QOF drugs was noted to increase faster than non QOF drug, both prior to and post QOF.	(McCarlie, Reid and Brady, 2007; MacBride-Stewart, Elton and Walley, 2008; Alabbadi et al., 2010)

In general, the research indicated improvements in the quality of care, in terms of increases in quality scores or achieving targets under different P4P schemes (i.e. Campbell et al., 2007; Fleetcroft et al., 2008; Millet et al., 2009; Vaghela et al., 2009; Mabotuwana et al., 2010; Oluwatowoju et al., 2010). However, such improvements were not consistent across different chronic diseases (Wang et al., 2006; Campbell et al., 2007; McGovern et al., 2007; Crawley et al., 2009). On the basis of quality targets, and comparison with unincentivised targets, some research found mixed results in effectiveness (Rosenthal et al., 2007; Steel et al., 2007; Sutton, Ikenwilo and Skatun, 2007); deterioration of the treatment received by patients (Mullen, Frank and Rosenthal, 2010); and an adverse effect on equality of care (Gulliford et al., 2007; Ashworth, Medina and Morgan, 2008; Eleftheriou and Tang, 2010). Other studies indicated that the quality of care had

shown improvement prior to P4P schemes; that there were reasons to doubt the effect of P4P (Young et al., 2007a; Pearson et al., 2008; Campbell et al., 2009).

Reflecting on notions of change and memory, these findings can be used as a departing point to understand how practices engaged in organisational changes. Despite mixed results, many studies showed that there was a high degree of enthusiasm from practices for participating in P4P schemes. The findings also showed that practices were able to improve their performance by fulfilling targets and achieving high scores, even in the early years of implementation. This reflects a willingness to change, as well as to adopt different approaches to managing service delivery.

3.5.2. EVIDENCE ON THE FACTORS AFFECTING P4P IMPLEMENTATION

Seventy two studies discuss the factors contributing to P4P implementation; socio-demographic characteristics, practice characteristics and organisational characteristics were the main factors that arose in the studies. Some minor factors such as organisational infrastructure, lag time and the interference with other programmes were also addressed.

Table 7. Evidence for Factors Affecting Implementation of P4P Schemes

Themes	Findings	Studies
Socio-demographic characteristics	Different age groups of patients show different relations amongst the measured variables.	(Doran et al., 2006; Hippisley-Cox, Vinogradova and Coupland, 2006; Bottle et al., 2007; Downing et al., 2007; McGovern et al., 2007; Gravelle, Sutton and Ma, 2009)
	Some studies show differences in performance between genders to varying degrees.	(Doran et al., 2006; Downing et al., 2007; McGovern et al., 2007; Campbell, 2009; Falaschetti et al., 2009b)
	Deprived areas experienced poor performance, inequalities of health care provision and higher disease prevalence, as well as unplanned hospital admissions.	(Doran et al., 2006; McLean, Sutton and Guthrie, 2006; Sigfried et al., 2006; Sutton and McLean, 2006; Wang et al., 2006; Wright et al., 2006; Ashworth et al., 2007; Bottle et al., 2007; Downing et al., 2007; Elder et al., 2007; Felt-Lisk, Gimm and Peterson, 2007; Gulliford et al., 2007; Leese, 2007; McGovern et al., 2007; Ashworth, Medina and Morgan, 2008; Doran et al., 2008a; Falaschetti et al., 2009b; Friedberg et al., 2010; Griffiths et al., 2010; Kiran et al., 2010)

Themes	Findings	Studies
Organisational feature	Larger practice size was associated with readiness to implement P4P schemes. Practice size showed different impacts in the improvement of quality.	(Doran et al., 2006; Sutton and McLean, 2006; Wang et al., 2006; Ashworth et al., 2007; Saxena et al., 2007; Young et al., 2007a; Landon and Normand, 2008; Grant et al., 2009; Gravelle, Sutton and Ma, 2009; Chung et al., 2010b; Doran et al., 2010; Fagan et al., 2010; Griffiths et al., 2010)
Scope and magnitude of incentive	Although there was no agreement on the percentage of payment considered as enough to motivate, the size of incentives was considered to be an important factor to motivate and change behaviour of health providers.	(Kouides et al., 1998; Beaulieu and Horrigan, 2005; Bokhour et al., 2006; Doran et al., 2006; Rosenthal et al., 2006; Chien et al., 2007; Gulliford et al., 2007; Mehrotra et al., 2007; Rosenthal et al., 2007; Young et al., 2007a; Young et al., 2007b; Pearson et al., 2008; Chung et al., 2010a; Chung et al., 2010b; Friedberg, Hussey and Schneider, 2010; Mullen, Frank and Rosenthal, 2010)
Organisational infra-structure	The increasing use of IT in assisting the delivery of healthcare in practices. This especially related to the use of electronic medical records.	(Williams et al., 2006; Checkland, McDonald and Harrison, 2007; Felt-Lisk, Gimm and Peterson, 2007; Gravelle, Sutton and Ma, 2007; Mehrotra et al., 2007; Sutton, Ikenwilo and Skatun, 2007; Cupples et al., 2008; Landon and Normand, 2008; Locke and Srinivasan, 2008; Pearson et al., 2008; Damberg, Raube and Teleki, 2009; McDonald and Roland, 2009; Menachemi et al., 2009; Petersen et al., 2009)

The socio-demographic characteristics (age, gender and social situation) of the patients served by primary care providers became a major concern in P4P research. Some of the studies focused on the issue of patient age and how it contributed to the implementation of P4P. Evidence shows that age correlates with how P4P affects quality (Doran et al., 2006; Williams and Lusignan, 2006; Williams, 2006; Gravelle, Sutton and Ma, 2009) and the prevalence of diseases potentially goes in line with the age increase (Hippisley-Cox, Vinogradova and Coupland, 2006; Downing et al., 2007; McGovern et al., 2007; Roland et al., 2009). Meanwhile, patient gender was found to have a moderate but significant effect on performance (Doran et al., 2006). Gender was also used to distinguish the variation between patient categories (Downing et al., 2007; McGovern et al., 2007; Falaschetti et al., 2009a; Falaschetti et al., 2009b; Roland et al., 2009). The issue of deprivation was reported, asserting that deprived areas were associated with under performance and a gap in the quality of care provided , higher disease prevalence and unplanned hospital admissions (Bottle et al., 2007; Downing et al.,

2007; Felt-Lisk, Gimm and Peterson, 2007; Gulliford et al., 2007; Roland et al., 2009; Kiran et al., 2010).

Several studies found that P4P reduced inequalities of care between deprived and affluent areas (Ashworth et al., 2007; Elder et al., 2007; McGovern et al., 2007; Ashworth, Medina and Morgan, 2008; Doran et al., 2008a); while some research revealed that the gap between these areas was widened (Sigfried et al., 2006; McGovern et al., 2007). Importantly, most P4P schemes did not reward the extra efforts needed to deliver care in such cases, which in turn discouraged healthcare professionals (McLean, Sutton and Guthrie, 2006; Friedberg et al., 2010).

Larger practice sizes were generally associated with readiness to implement P4P schemes (Damberg, Raube and Teleki, 2009). Yet, evidence on the performance of these practices varied and was not necessarily better than those of a smaller size (Doran et al., 2006; Ashworth et al., 2007; Saxena et al., 2007; Doran et al., 2010; Griffiths et al., 2010). The different sizes implied different ways of managing change (Grant et al., 2009). It reflects the capacity and resources owned by organisations in delivering services to patients, such as the use of IT or more clinicians (Sutton and McLean, 2006; Landon and Normand, 2008). This raised concerns about small practices that potentially face a lack of organisational infrastructure and staff. However, it was found that despite differences in size, small practices were also able to excel in their performance (Wang et al., 2006).

Parts of the literature focused on the magnitude and scope of incentives. Although there was no consensus on the amount of financial incentive that should be distributed, most studies agreed that the amount of incentive was vital in making the P4P motivate healthcare professionals to change their behaviour (Kouides et al., 1998; Mehrotra et al., 2007; Rosenthal et al., 2007; Mullen, Frank and Rosenthal, 2010). It was also reported that the existing incentives were considered small, albeit that considerable motivational effects were expected from them (Young, Burgess Jr and White, 2007; Young et al., 2007a; Friedberg et al., 2010).

As a general theme, the studies indicate that complexities in managing organisations are functions of both internal (i.e. practice size) and external (i.e. socio-demographic characteristics of population) factors.

3.5.3. EVIDENCE ON UNINTENDED CONSEQUENCES

This review found 38 studies which identified unintended consequences of P4P implementation. Dysfunctional consequences were reported to exist in varying degrees. Some studies maintained that there was little evidence or insignificant effects of P4P in causing dysfunctional consequences, such as tunnel vision, erosion of motivation and gaming (Beaulieu and Horrigan, 2005; Chien et al., 2007; Campbell, McDonald and Lester, 2008; Doran et al., 2008b; Millet et al., 2009). However, some research reported that adverse effects were significant, especially on the distraction of patient-healthcare professional relationship (Shen, 2003; Maisey et al., 2008; Campbell et al., 2009; McDonald and Roland, 2009; Van den Heuvel et al., 2010).

Table 8. Evidence for P4P and Its Unintended Consequences

Themes	Findings	Studies
Tunnel vision	The literature reports mixed results about the tunnel vision. However, more evidence shows that tunnel vision took place when focusing only on rewarded targets and ignoring other, unincentivised ones.	(Beaulieu and Horrigan, 2005; Roland et al., 2006; Young, Burgess Jr and White, 2007; Campbell, McDonald and Lester, 2008; Maisey et al., 2008; Campbell et al., 2009; Mullen, Frank and Rosenthal, 2010; Van den Heuvel et al., 2010; Walker et al., 2010)
Erosion of motivation	There is little evidence to show that P4P did undermine internal motivation, especially amongst physicians, but contrary evidence also exists especially amongst nursing staff.	(Roland et al., 2006; McDonald et al., 2007; Campbell, McDonald and Lester, 2008; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008)
Discontinuity of care	P4P could lead to potential loss of continuity of care.	(Roland et al., 2006; Campbell et al., 2007; Campbell, McDonald and Lester, 2008; Maisey et al., 2008; Campbell et al., 2009)
Racial and ethnic disparities	Mixed results with some showing improvement in the quality of healthcare provision in all ethnic groups; yet, the magnitude is different for each ethnic group.	(Wang et al., 2006; Chien et al., 2007; McGovern et al., 2007; NAO, 2008; Millet et al., 2009; Chien, Li and Rosenthal, 2010; Friedberg et al., 2010)
Adverse selection and gaming	P4P might have led to gaming and adverse selection. Gaming: manipulation of the	(Shen, 2003; Beaulieu and Horrigan, 2005; Casalino et al., 2007; Chien et al., 2007; Gravelle, Sutton and Ma, 2007;

Themes	Findings	Studies
	programme to magnify payment, such as miscoding diagnosis or mispresenting data. Adverse selection: avoiding severely ill patients. Mixed results, with some degree of gaming reported.	Rosenthal et al., 2007; Doran et al., 2008b; Fleetcroft et al., 2008; Gravelle, Sutton and Ma, 2009; Sutton et al., 2009)
Workload	Increase in both clinical and administrative workload	(Leese, 2007; MacBride-Stewart, Elton and Walley, 2008; Maisey et al., 2008; Whalley, Hugh and Sibbald, 2008; Gemmell et al., 2009; McDonald and Roland, 2009; Van den Heuvel et al., 2010)
Ongoing physician-patient relationship	Loss in patient centeredness, loss of choice of whom to see and the treatments became heavily dependent on 'pharmacological approaches' to attain rapid medical progress.	(Beaulieu and Horrigan, 2005; Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; Checkland et al., 2008; Fleetcroft et al., 2008; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; Campbell, 2009; McDonald and Roland, 2009; Rodriguez et al., 2009; Van den Heuvel et al., 2010)
Impact on autonomy and authority	Significant changes in autonomy especially for nurses.	(McDonald et al., 2007; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; Whalley, Hugh and Sibbald, 2008; Grant et al., 2009)
Changing professional boundaries	Changes in relationships amongst health professionals. Re-stratification of roles.	(Leese, 2007; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; Grant et al., 2009; Checkland and Harrison, 2010; Van den Heuvel et al., 2010)
Others	Tendency to treat patients more than they need or more than necessary. Positive spill over to unincentivised indicators.	(Roland et al., 2006; Gravelle, Sutton and Ma, 2007; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Menachemi et al., 2009; Rodriguez et al., 2009; Sutton et al., 2009; Checkland and Harrison, 2010; Chung et al., 2010b; Coleman, 2010; Walker et al., 2010)

Apart from those showing dysfunctional effects, some studies also identified significant shifts in professional roles. UK QOF for instance caused an increase in workload for healthcare professionals as they put their focuses on both patient care and information recording. In turn, this led doctors to delegate the most routine work to nurses (Leese, 2007; Maisey et al., 2008; Whalley, Hugh and Sibbald, 2008; Grant et al., 2009). This implied an expansion of roles for nurses, while at the same time, potentially de-skilling doctors (Campbell, 2009; Van den Heuvel et al., 2010).

In terms of organisational memory, acceptance of change in role boundaries may become an incentive for engaging in mutual learning among professionals, which in turn enhances an organisation's knowledge capacity and memory. This enables organisations to engage in more complex processes. On the downside, as relationships become a source of competence and knowledge, changes in patient-doctor relationships can disturb an organisation's ability to accrue information and knowledge on patients.

Despite such cautions, the interest in applying P4P in health care settings has continued over the last decade. This paradox arises from the fact that despite the overall consensus on the dysfunctional consequences and disadvantages, P4P programmes continue to be implemented as a promising strategy to improve health care quality.

3.5.4. IMPACT ON ORGANISATIONAL BEHAVIOUR

This section discusses how P4P implementation affects organisational behaviour and involves 42 studies. Table 9 below shows the main themes of this section.

Table 9. Evidence for P4P and Its Organisational Behaviour

Themes	Findings	Studies
Effectiveness in affecting behaviour	Financial incentives were perceived to be effective when they were able to drive behavioural change. However, the current P4P schemes, especially in the US, were perceived to offer modest financial incentives, which is not enough to induce behavioural change.	(Rosenthal et al., 2005; Bokhour et al., 2006; Elder et al., 2007; Campbell, McDonald and Lester, 2008; Doran et al., 2008a; McDonald, Harrison and Checkland, 2008; NAO, 2008; Campbell et al., 2009; Crosson et al., 2009; Alabbadi et al., 2010)
Motivation	Various perspectives on individual motivation, some less favourable findings exist, but it was found also that P4P did not damage internal motivation. In fact, there was a notion of 'altruistic motivation'. Some issues of motivation were specifically reported by nurses.	(Roland et al., 2006; McDonald et al., 2007; Campbell, McDonald and Lester, 2008; McDonald, Harrison and Checkland, 2008; Campbell, 2009; Friedberg et al., 2010)
Attention to risk	More attention is paid to risk adjustment.	(Rosenthal et al., 2007)
Organisational structure and process	Notable changes in responsibilities as well as roles in organisations. There were also increasing collective efforts from organisational member,	(Rosenthal et al., 2005; Roland et al., 2006; Sutton and McLean, 2006; Teleki et al., 2006; Checkland, McDonald and

Themes	Findings	Studies
	in achieving targets.	Harrison, 2007; Leese, 2007; McDonald et al., 2007; Campbell, McDonald and Lester, 2008; Checkland et al., 2008; Huby et al., 2008; MacBride-Stewart, Elton and Walley, 2008; Damberg, Raube and Teleki, 2009; Grant et al., 2009; McDonald et al., 2009; Menachemi et al., 2009; Strong, South and Carlisle, 2009; Checkland and Harrison, 2010; Van den Heuvel et al., 2010)
Others	Changes in roles and identity, as well as autonomy. Self-surveillance emerged. P4P was seen to encourage organisations to engage in quality improvement, not only at an organisational level, but also at an individual level. Additionally, P4P induced a more systematic method in managing chronic illness diseases.	(Meterko et al., 2006; Checkland et al., 2008; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; McDonald et al., 2008; Crosson et al., 2009; Damberg, Raube and Teleki, 2009; Grant et al., 2009; McDonald and Roland, 2009)

Primary care practices were reported to have built new chronic disease clinics, installed compatible IT system and set up new positions to accommodate requirements. Building new clinics enabled some practices to offer services for targeted diseases; yet, this also led to the recruitment of additional professionals, who in most cases were nurses. This expanded the structure of organisations and changed patterns of staffing (Leese, 2007).

There was a need to install IT systems to support practices in obtaining patients information. In the case of UK QOF, the use of data templates became a necessity for practices to collect the data required for the performance assessment (Damberg, Raube and Teleki, 2009; Menachemi et al., 2009). While this focus on IT enhanced the knowledge repository capacity of organisations by keeping more detailed patient information, it also came as a distraction for patient-healthcare professional relationships (Campbell, McDonald and Lester, 2008). Moreover, as attention was focused on completing the templates, the richness of information was reduced, as most of data took the form of yes/no questions (Strong, South and Carlisle, 2009). Checkland and Harrison (2010) suggested that the application of

IT to assist P4P systems affected the way people work, in the sense that the templates 'dictated' what healthcare professional should do.

The incentives created by P4P encouraged collective efforts from the members of an organisation and created new roles in organisations (Teleki et al., 2006; McDonald, Harrison and Checkland, 2008; Damberg, Raube and Teleki, 2009). Doctors were reported to delegate more routine clinical work to nurses, which changed roles and responsibilities within a practice (Checkland, McDonald and Harrison, 2007; McDonald et al., 2007; Maisey et al., 2008; Grant et al., 2009; Van den Heuvel et al., 2010). This delegation would be enhanced by the fact that around 30% of GPs work could be undertaken by nurses (Leese, 2007). However, nurses became more proud of their new roles and responsibilities and enjoyed more autonomy(Grant et al., 2009). There is modest evidence that recruiting more nurses to perform routine clinical QOF targets would lead to better intermediate patient outcome (Gemmell et al., 2009; Griffiths et al., 2010).

Most practices were also reported to have created an additional role for a person who was in-charge of ensuring targets fulfilment (Huby et al., 2008; Grant et al., 2009). Formally, the creation of these new roles affected the structure of organisations, in terms of expanding the diversity of organisational roles (Roland et al., 2006). Informally, the emergence of new 'strata' within the practices is said to have induced a re-stratification of roles amongst health care professionals (Huby et al., 2008; McDonald, Harrison and Checkland, 2008). This means staff became more aware of their responsibilities and at the same time they felt that they were being 'chased' by those who were responsible to ensure targets were achieved (McDonald, Harrison and Checkland, 2008).

These findings indicate that there are interplays between individual and organisational-level behavioural changes, as well as between informal and formal relationships. It is also worthy of note that the way people understood the change process appeared to be very much influenced by their individual journeys. The way in which people justified changes in relationships and roles and accepted the

facts that they needed to behave differently, gave the importance of organisational memory in shaping both personal and organisational readiness for change.

3.5.5. EVIDENCE ON ORGANISATIONAL MEMORY AND CHANGE

This review was able to find 23 studies that discuss the impact of P4P on organisational change and how organisational memory influenced the performance of such changes *(see Table10).*

P4P schemes can be considered as a 'mechanism for change' (Huby et al., 2008). This means that they act as a trigger for practice organisations to engage in the change process. Virtually all the research included in this part of the review suggests that organisations that participated actively in P4P schemes, such as UK QOF, adjusted their organisational systems. However, the literature also demonstrate that there were differences in how members of organisations viewed the impact of P4P on their organisations (Huby et al., 2008). These differences reflected a process of staff 'sense- making' of how they understood and reacted to P4P as a trigger for change and the consequences of this on their organisation. In the UK, for example, although considerable changes took place in GP practices because of QOF, practice staff might attribute these changes to other factors rather than the QOF (Huby et al., 2008; Checkland and Harrison, 2010). In their study, Checkland and Harrison (2010) noted that GP practice staff repeated a narrative of having 'no change' because of QOF in their organisation and their clinical and professional behaviours and their ethos had always been 'patient-centred'.

Table 10. Evidence on Organisational Memory and Change

Themes	Findings	Authors
Readiness to implement change	Practices equipped themselves for the implementation of P4P in several ways, including incentive distribution and trainings for staff.	(Beaulieu and Horrigan, 2005; Bokhour et al., 2006; Casalino et al., 2007; McDonald et al., 2007; Locke and Srinivasan, 2008; Whalley, Hugh and Sibbald, 2008; Grant et al., 2009)
Engagement of members to change	High engagement of all healthcare professionals in accomplishing P4P targets was reported; for example, the involvement of nurses in doing routine work for QOF. Substantial re-organisation was reflected through new strata, enabling people to ensure that their colleagues fulfilled the responsibility for QOF targets.	(Roland et al., 2006; Checkland, McDonald and Harrison, 2007; Leese, 2007; Huby et al., 2008; Damberg, Raube and Teleki, 2009; Grant et al., 2009; McDonald et al., 2009)
Source of change	Studies found that practices adjusted or changed the way they conducted their activities 'mode of operation' as required by P4P schemes. This underlines the importance of financial incentives as a mechanism of change.	(Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; Huby et al., 2008; Damberg, Raube and Teleki, 2009; Checkland and Harrison, 2010)
Levels of change	Incentives can be used as s catalyst for change, especially in system level change. Practices made adjustments in various organisational elements, such as structure. It was also reported that there were changes in the ethos and style of work.	(Bokhour et al., 2006; Huby et al., 2008; Damberg, Raube and Teleki, 2009; Sutton et al., 2009; Checkland and Harrison, 2010)
Changes in organisational elements	Each study reported different changes in details, but the pattern was relatively similar, such as increase in staff including those responsible for IT and HCAs, overall increase in expense to offset financial gains, setting up informal/formal teams and setting up chronic disease clinics. There were also some issues regarding re-stratification of status amongst healthcare professionals. A more bureaucratic environment was also reported.	(Roland et al., 2006; Leese, 2007; Checkland et al., 2008; Huby et al., 2008; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Gemmell et al., 2009; Grant et al., 2009; McDonald et al., 2009; Menachemi et al., 2009; Checkland and Harrison, 2010)
Knowledge repository in hard system (Database, protocol, procedures, rulebooks)	Organisations store information in their memory systems using IT and data templates. While it offered advantages as a source of knowledge, the strict guidance embedded in data templates brought some disadvantages. The use of templates provided 'certain norms or values' to diagnose and deal with patient's condition. This could be discouraging sometimes. Specific to QOF, the use of templates	(Beaulieu and Horrigan, 2005; Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; McDonald et al., 2009)

Themes	Findings	Authors
	helped in the accomplishment of QOF targets.	
Assist sharing information/access of knowledge/ knowledge sharing	IT was used in assisting P4P implementation to improve efficiency and better use of evidence. Yet, a drawback was that it potentially shaped the norm of not recording unneeded information in the system.	(Checkland, McDonald and Harrison, 2007; Mandel and Kotagal, 2007; Checkland and Harrison, 2010)
Knowledge repository in soft system (people). The development of organisational stories	People served as repository of knowledge or memory. They contributed to the development of 'stories' in the organisation. Healthcare professionals maintained the narrative of 'no changes' to reflect that the practice had already undergone various things with regard to QOF.	(Checkland, 2007; Huby et al., 2008; McDonald et al., 2008; Checkland and Harrison, 2010)
Others	Practices developed or improved their patients' records to ensure better patient management, as well as being a part of compliance to guidelines. It shows a more rigorous approach to patients. Consistent use of data recording system, especially for incentivised conditions. GPs reported less control over the achievement especially in coordinating resources to achieve targets. In addition, there was a reported gap between observed change and reported change by respondents.	(Young et al., 2007b; Huby et al., 2008; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Grant et al., 2009; McDonald et al., 2009; Menachemi et al., 2009; Checkland and Harrison, 2010)

In reality, P4P has led to changes in both hard systems, such as physical and infrastructure changes, and soft systems, including behavioural and structural changes (Checkland, McDonald and Harrison, 2007; Edwards and Neal, 2008; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; Grant et al., 2009; McDonald and Roland, 2009). Physical and infrastructure changes typically involve purchasing new equipments, installing IT systems and setting up new chronic disease clinics (Edwards and Neal, 2008). Changes in organisational structure were related to an organisation's decision to enlarge their capacity by establishing new clinics and this required recruiting new healthcare professionals and creating additional positions to accommodate the establishment of the IT system. While this reflected changes in staff patterns and workflows, it also led to changes in professional roles and relationships. Some research showed that GPs

started to work as specialists and nurses began to run minor and stable medical conditions (Checkland, McDonald and Harrison, 2007; Maisey et al., 2008; Grant et al., 2009). Changes also affected the pattern of decision making and control in an organisation. Thus, fewer people initiated decision making and a group of GPs was formed to monitor the behaviour of their colleagues to ensure a better performance, which in turn affected the identity of the professionals (Checkland, McDonald and Harrison, 2007; Maisey et al., 2008; McDonald, Harrison and Checkland, 2008; Grant et al., 2009; McDonald and Roland, 2009).

Altogether, this evidence suggests that there was a significant shift or reconfiguration of roles within GP practices. Although the clinical authority attached to professionals remained respected, additional roles were attached to those who ensured the accomplishment of QOF targets blurred professional boundaries.

There was also evidence that some practices made adjustments or changes to their systems which represented a deeper level of organisational change (Bokhour et al., 2006; Sutton, Ikenwilo and Skatun, 2007; Damberg, Raube and Teleki, 2009; Checkland and Harrison, 2010). Various studies showed how practices embedded change initiatives by developing physician level incentives to strengthen shared learning, or in the case of large and modern practices, conducted financial investment to make them more business-like (Bokhour et al., 2006; Roland et al., 2006; Sutton, Ikenwilo and Skatun, 2007; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Menachemi et al., 2009; Checkland and Harrison, 2010). Bokhour et al. (2006) suggest that financial incentives can be used as a catalyst for change and especially for system level change. Specifically, the involvement of various organisational members can be seen as evidence of a genuine engagement process, in a way that involves different professions in self-surveillance (McDonald, Harrison and Checkland, 2008). This means that practices undergo changes and adjust themselves at different levels by setting up changes in organisational elements. Moreover, previous research also notes the emergence of a practice unique ethos and style of work.

Yet, it can be noted that individual and organisational memory influenced the way people behaved and reacted to the trigger of change, based on their former experience. Practices experiencing successful changes might be more able to deal with P4P and use it as a stepping stone to improving their services. For an organisation's members, such successes might affect their understanding of changes, which in turn, enriches their professional knowledge. Consequently, the way professionals developed the knowledge and use it in day-to-day organisational life could potentially shape the organisation's identity.

While studies did not specifically discuss the notion of memory, it is clear that the use of data templates in the information system created the physical repositories of knowledge. With the implementation of P4P schemes, such as QOF, practices were required to comply with data templates (Beaulieu and Horrigan, 2005; Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; McDonald and Roland, 2009). Along with the function to capture and store patient information in the system which can be used for the assessment, these information repositories serve as a bank of information on a patient's condition, as well as the treatments provided from them. In that sense, practices were able to extract information much more easily than they had done when using a paper-based system. The use of data templates improved capacity for knowledge and helped other organisational members obtain and share knowledge. While these templates benefitted nurses in particular by reminding them of what they were supposed to do (Checkland, McDonald and Harrison, 2007), their implementation had both negative and positive effects.

The advantage of using templates lies in encouraging healthcare professionals to collect the required information relating to particular chronic diseases. In addition, in terms of sharing knowledge, the effective use of information stored in the templates means that there is a transfer of knowledge. This enables physicians to delegate work and pass on clinical information to be used by less experienced or less qualified staff (Checkland, McDonald and Harrison, 2007; Menachemi et al., 2009). However, on the other hand, the extensive use of data templates could limit

and undermine the role of healthcare professionals in getting more information about a patient's health (Checkland, McDonald and Harrison, 2007).

Overall, there is a strong indication that most changes were externally driven, as practices tried to accomplish government targets (Campbell, McDonald and Lester, 2008). In this sense, practices appear to have adjusted or changed the way they conducted their activities 'mode of operation' regularly, according to the requirement of the respective P4P schemes (Checkland and Harrison, 2010).

3.6. CONCLUSION

Despite a considerable amount of evidence and research on the effectiveness and consequences of P4P programmes, there is relatively little evidence in the literature about the practical implementation issues of P4P and in particular, the readiness of organisations for change, and organisational memory are rarely considered. However, this review provides insights in two main areas: the first is broad organisational changes or commodifying effects; and the second relates to changes in working practices. It is also noted that nearly all relevant studies were conducted on the UK QOF.

Changes in working practices were observed, including IT-assisted patient information recording and re-stratification of roles between healthcare professionals. As information became more readily accessible for organisations, this enabled knowledge sharing between professionals and enhanced the organisational memory capacity. Another change in working practice involved a significant shift in the roles attached to healthcare professionals. Practice staff also reported having a strong shared commitment to achieving QOF targets, so that they were reminding each other to fulfil their QOF related responsibilities. This created a situation of 'chased and chaser' in the practices, which reflected people's awareness of role expectations.

In a broader sense of organisational change, this review was able to identify several changes. Firstly, there was a high degree of enthusiasm for P4P and the changes it brought forward to the practices; acting as a stimulus for change, QOF has been able to push the practices to expand and improve their service delivery. Secondly, practices became more aware of various factors that could potentially contribute to their performance level. These factors could be either their internal capacity (i.e. practice size) or external factors such as demographic characteristics of patient population. Thirdly, in order to ensure that they were capable of achieving the QOF targets, practices managed changes in organisational arrangements, including recruiting more staff, delegation of routine clinical work from doctors to nurses and also from nurses to healthcare assistants, as well as

more engagement in skill training, which were prominently shown in the studies. Finally, while the evidence of change was detected, interestingly the narrative of having 'no change' was similarly observed. Healthcare professionals believed strongly that the implementation of QOF had not led to actual differences in working practices. Instead, they believed that they were already involved in such activities prior to QOF. This was the focal point for addressing the 'sense-making' view in the practices and showing how people perceive changes based on their memory.

CHAPTER 4

REVIEW OF LITERATURE:

THE NATURE AND THE LEVEL OF ORGANISATIONAL CHANGES

4.1. INTRODUCTION

This thesis focuses on how GP practice organisations respond to QOF. Most importantly, the thesis aims to explore what changes QOF has triggered in practices and what factors have influenced the practice responses to QOF. While the literature suggests that there have been some common patterns of response, the organisational impact of QOF is not well understood. In order to provide an in depth understanding of these issues, this chapter explains the applicability of a group of theories of organisational change, including: 1) levels of change (Wilson, 1992); and 2) organisational memory, in particular related to organisational competence (Walsh and Ungson, 1991; Winjhoven, 1999).

4.2. ORGANISATIONAL CHANGE

4.2.1. PROCESS AND IMPLEMENTATION

Organisational change is a complex concept and different researchers define it in different ways. Difficulties in defining change arise from the fact that *'change is predominantly a perceptual phenomenon, understandable only in terms of individuals' accounts of definitions of the situation'* (Wilson, 1992). Change takes place when organisations shift from one state to another (Ford and Ford, 1995; Ragsdell, 2000). Change may also refer to the continuous renewal processes of organisational direction and structure, as well as organisation's capacity to fit with internal and external environmental demands (Moran and Brightman, 2000). Although it can be difficult to deal with change (Rollinson & Broadfield, 2002), an organisation's ability to do so determines their competitive survivability (Hage, 1999).

Organisational change can be triggered internally or externally. Such triggers include technological changes, shifts in the economic climate, political changes, changes to government regulations, performance gap, leadership regimes and shifts in the core business strategy (Nadler and Tushman, 1989; Bedeian & Zammuto, 1991; Buchanan & Huczynski, 2004; Senior & Fleming, 2006; Cummings & Worley, 2008; Johnson et al., 2008). In healthcare, the complexity of organisational change has been analysed through the lens of complex adaptive systems (Fraser and Greenhalgh, 2001; Plsek and Greenhalgh, 2001; Wilson, Holt and Greenhalgh, 2001; Parkin, 2009). From that perspective, an organisation can be seen as:

> *''...a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions change the context for other agents'' (Plsek and Greenhalgh, 2001).*

Consequently, the way people respond to change can be varied and may involve resistance to change (Plsek and Wilson, 2001). Healthcare organisations are often perceived as highly resistant to change, because of the 'political nature of health-

care delivery', the various clusters of professionals (physicians, nurses, health technicians and administration staff), and the 'special veto power of clinicians'(Alford, 1975). For instance, an individual professional may approve of applying new ways to cure diseases, but be resistant to how target numbers are set up for curing those diseases, professional could adopt their own judgement to decide how to manage their individual cases (Plsek and Wilson, 2001). This implies that different mental models and the preferences of health staff, such as practitioners, nurses, and other healthcare professionals, may influence their actions (Plsek and Greenhalgh, 2001; Wilson, Holt and Greenhalgh, 2001; Checkland, 2007). Senge (1990) argues that the success of change is affected by the presence of a shared mental model representing a widely shared vision. People should have a similar perspective on how they understand the change and how they want the outcome to be.

In conceptual change, the mental model can be used to interpret and analyse how individuals share, exchange, and negotiate their ideas (Chi, 2008). According to Wijnhoven (1999, p. 13) these processes can be influenced by a defensive and competitive course of actions. This explains how people debate their ideas and perspectives on change. In healthcare, the nature of 'tensions and paradoxes', which is created as a result of competition and cooperation, leads to dynamic response to external changes (Plsek and Greenhalgh, 2001; Parkin, 2009). The dynamic response provides an interpretation of why change in healthcare organisations is an unpredictable, non-linear phenomenon, and highly resistant (Checkland, 2007).

In order to lessen resistance, organisations can find ways to push driving forces for change ,while at the same time eliminating restraining forces (Iles and Sutherland, 2001; Heward, Hutchins and Keleher, 2007). In this scenario, reward or payment can be used as one of the ways to support change (Cornell, 1996). However, the impact of reward on change can be varied, as it may affect performance positively or negatively (Gagné, Koestner and Zuckerman, 2000; Burke & Litwin, 2008).

In understanding the change processes, Nadler and Tushman (1989) categorise it into four different types, adaptation, re-creation, re-orientation and fine-tuning; re-creation and re-orientation potentially involve adjustments in strategic direction, either in anticipation or in reaction to changes in the environments. Such changes can also be categorised as second order changes, since they may involve a substantial shift or replacement of strategic orientation (Nadler and Tushman, 1989; Iles and Sutherland, 2001).

Change can also be seen from a process and implementation perspective, as well as whether its occurrence is planned or emergent. While emergent change reflects political decisions in its process; planned change is built upon logical incrementalism, involving elaboration of commitment and shared needs in its processes (Wilson, 1992). From an implementation perspective, planned change has the advantage of being able to construct plans to reduce resistance; emergence change assumes the implementation process as a follow-up from various factors and processes which preceded it.

Figure 5. Characterisation of Approaches to Organisational Change

	The Process of Change	**The Implementation of Change**
Planned Change	1 Logical incrementalism and various need, commitment, and shared vision models	2 Reducing resistance to change (e.g. force field analysis)
Emergent Change	3 Characteristics of strategic decisions: political process models	4 Contextualism: implementation is a function of antecedent factors and processes

Source: (Wilson, 1992)

Each proposed framework has points of strength and weakness. By focusing on the timing of change, Nadler and Tushman (1989) were able to describe how change differs in form as a reactive and gradual process or even as a major strategic shift. Wilson (1992) portrayed organisational change in the context of process and implementation. He underlined the importance of incorporating organisational context, such as the political process and the interaction of various factors, including resistance, which acts as an antecedent for the implementation of change. As this research aims to analyse and explore the implementation of

QOF in primary care practices, the adoption of Wilson's framework is particularly useful in assisting the analytical process.

Without disparaging the complications of any change, strategic change is said to be particularly difficult. Both re-creation and re-orientation change involve a significant shift in both organisational process and strategic orientation. In such change, organisations need to ensure that changes are implemented through all organisational levels and subsystems(Rollinson & Broadfield, 2002). Rollinson and Broadfield (2002) add that the interconnection between strategy, structure, people, technology and tasks should be taken into account. Change fails because organisations tend to overlook the interconnection between these areas.

Therefore, there is no definite way to ensure the success of change (Rollinson & Broadfield, 2002). Yet, the possibility of achieving successful change is much higher if organisations consider changes at different levels and manage the interconnectedness between sub-systems (Applebaum and Wohl, 2000; Ferlie and Shortell, 2001; Rollinson & Broadfield, 2002).

4.2.2. LEVELS OF CHANGE

Change may take place either on the operational level or go deeper into the strategic levels (Street and Gallupe, 2009). Ferlie and Shortell (2001) argue that changes take place on four different levels, individual, group, organisational and larger system or environmental. Meanwhile, Wilson (1992) categorises levels of change differently, by emphasising whether changes take place at mainly operational or predominantly strategic levels.

Table 11. Levels of Organisational Change Classified by Degree of Change

DEGREE OF CHANGE	OPERATIONAL / STRATEGIC LEVEL	CHARACTERISTICS
Status Quo	Can be both operational and strategic	No change in current practice
Expanded Reproduction	Mainly operational	Change involves producing more of the same (goods or services)
Evolutionary Transition	Mainly strategic	Change occurs within existing parameters of the organisation (e.g. change, but retain existing structure, technology, etc).
Revolutionary Transformation	Predominantly strategic	Change involves shifting or redefining existing parameters. Structure and technology likely to change, for example

Source: Wilson (1992)

With a minimum degree of change, organisations maintain the *status quo*. At this point, there is no significant change taking place in an organisation, either at the operational or strategic levels. The next degree of change, *expanded reproduction*, takes place mainly at the operational level. At this level, organisations conduct change without modifications to the existing goods or services (Wilson, 1992). Other researchers refer to this level of change as developmental change, which refers to the improvement of the existing situation, with either planned or emergent change (Ackerman, 1997). This change is usually categorised as a first order change (Iles and Sutherland, 2001).

By contrast, *evolutionary transition* takes place mainly at the strategic level. This type of change takes place within the existing organisational context or similar organisational structures (Wilson, 1992). It means that organisations may experience change, yet, the underlying organisational contexts are still the same. Transitional change can also be understood as a staged process, in the sense that change may not happen neatly, but the transition from the original condition to a new one is managed in stages, so as to make it more manageable (Garside, 1998; Alvesson, 2002). This level originates in Lewin's three-stage change process which consists of (1) unfreezing the existing equilibrium or status quo; (2) change or movement; and (3) refreezing the new status or equilibrium (Ackerman, 1997; Iles and Sutherland, 2001).

The degree of change reaches its highest level when it affects the strategic level. This change is referred to as ***revolutionary transformation*** (Wilson, 1992) or more generally as transformational change (Iles and Sutherland, 2001)*.* Unlike the first two types of change, transformational change addresses a fundamental shift of strategic orientation or even shift in the way organisations think (Ackerman, 1997). Undergoing transformational change may bring a significant alteration to organisational strategy, structure and norms and values (Wilson, 1992). Organisations may find it difficult to control everything, especially when they undergo a radical transformational change process. The time period for conducting transformational change is longer and less controllable than developmental or transitional change (Wilson, 1992; Ackerman, 1997).

In order to explore why and how GP practices have changed after the introduction of QOF as a new government payment policy, this study tries to analyse and understand in depth the level and direction of changes took place in GP practices after 2004.

4.3. ORGANISATIONAL COMPETENCE: THE PERSPECTIVE OF ORGANISATIONAL MEMORY

With the growing importance of knowledge management, intangible assets such as organisational memory gain importance as key factors for constructing organisational competence (Winjhoven, 1999; Drejer, 2000; Drejer & Riis, 2000; Drejer, 2001). For the purpose of this thesis, the focus of this discussion is on the role of organisational memory (OM) in constructing competence[15].

In general, organisational memory comprises two aspects, which can be discussed as mental and structural aspects(Walsh and Ungson, 1991; Weick, 2000; Kruse, 2003). The mental aspect deals with data, knowledge or information (Walsh and Ungson, 1991; Weick, 2000). Mental OM relates to the capacity and capability of organisations in managing knowledge embedded in organisations (Conklin, 1996). This includes the process of knowledge acquisition (Kruse, 2003), and the understanding of what information is essential for organisational memory, as knowledge is sourced from information which includes a process of judgement and behavioural consequences (Walsh and Ungson, 1991; Cong and Pandya, 2003).

The structural aspect of memory refers to the use of roles, procedures, or structural and architectural memory arrangement (Walsh and Ungson, 1991; Weick, 2000). This relates to the processes of knowledge retention and knowledge retrieval (Kruse, 2003), which are also essential components of organisational learning (Olivera, 2000). The existence of memory or 'knowledge storage' enables organisations to use and re-use knowledge, which in turn allow it to develop organisational competence over time (Nelson & Winter, 1982; Anand, Manz and Glick, 1998; Cong and Pandya, 2003; Winter, 2003; Tsai, Lin and Chen, 2010).

---

[15] In their work, Hamel and Prahalad define a core competence by using the following example 'a bundle of skills and technologies rather than a single discrete skill or technology. [ ] A core competence represents the sum of learning across individual skill sets and individual organisational units. Thus, a core competence is very unlikely to reside in its entirety in a single individual or small team.' (Hamel & Prahalad, 1996).

Over time, memory helps individuals and organisations to learn how to justify their decisions and their actions through the wisdom and insight inspired by their accumulated knowledge (Kruse, 2003). OM enables organisations to utilise their knowledge in managing and coordinating activities, which can include the modification or standardisation of resources (Weinberger, Te'eni and Frank, 2008).

4.3.1. PROCEDURAL AND DECLARATIVE MEMORY

Organisational memory is constructed on different levels, and has different forms and even contents, each of which has its own features and may affect organisational competence in different ways (Cohen, 1991; Walsh and Ungson, 1991; Tsai, Lin and Chen, 2010). The literature notes different categorisations of memory, sometimes referred to as knowledge. Based on its function, there are four types: (1) know-how, which is useful in conducting operational responsibility, and is procedural; (2) know-why, which understands why such tasks are conducted; (3) memory information, which may be represented through information technology or systems; and (4) meta memory, which is the super level of memory, sometimes is called memory on memory (Brown and Duguid, 1991; Moorman and Miner, 1998; Wijnhoven, 1999). Other categorisations of memory include the notion of tacit and explicit knowledge (Wijnhoven, 1999).

The most common types of OM are procedural memory and declarative memory. Both of these types of memory can also be called substantive memory (Wijnhoven, 1999). Procedural memory can be referred to as knowledge about how things are done, and this represents skilled performance both 'cognitive and motoric' (Cohen, 1991; Cohen and Bacdayan, 1994), procedural memory also known as know-how memory (Wijnhoven, 1998). Know-how memory comprises rules, procedures, facts and skills built on routines (Nelson & Winter, 1982; Gersick and Hackman, 1990; Cohen and Bacdayan, 1994; Wijnhoven, 1998; Becker, 2004).

The second type of memory is declarative memory, which contains knowledge of facts, concepts, or events (Cohen, 1991; Anderson, 1996; Tsai, Lin and Chen, 2010). Wijnhoven (1999) asserts that it exists 'when the information speaks of itself'. This type of memory involves knowledge of know-what or know-why, that can be applied to various contexts and used to rationalise or interpret data (Huber, 1991; Moorman and Miner, 1998; Wijnhoven, 1999; Tsai, Lin and Chen, 2010). In primary care practice, such memory may be represented by information about patients' demographic characteristics.

These two types of memory develop and function differently. Procedural memory is created through regular or routine engagement in certain activities, while declarative memory can be found from readily available sources. Organisations typically rely on both types of memory when implementing policies. A simple analogy of this is while procedural memory explains how an individual learns to ride a bicycle, their declarative memory about two different locations helps them to get from the point A to B in time. Therefore, the 'know-how' can also be seen as an operationalisation of the 'know-why'.

Both memory types involve aspects of 'remembering'. Individuals and organisations learn and remember what they have learnt in a process which can be described as 'episodic memory' (Rowlinson et al., 2010). Episodic memory reflects how experiences help organisations articulate a sense of their future. Accordingly, Van der Bent et al (1999) note that *'related events/initiatives are more likely to have an impact on memory and subsequent learning'*. In this sense, this research believes that staff in GP practices would be able to compare and contrast their experiences with their current position and future expectations.

Beyond the level of episodic memory, there is meta-memory and memory information[16]. Meta-memory represents the value, norms and quality information of the substantive memory; it is also called memory-about-memory (Wijnhoven, 1999). Meta-memory is centred on the need for organisations to align their past

---

[16] Memory information includes 'retrieving, using, and communicating' memory (Wijnhoven, 1999).

experiences with their organisational structure, norms and management systems, to utilise the OM (Wijnhoven, 1999; Tsai, Lin and Chen, 2010).

Another critical aspect of organisational memory management is related to the 'storing' of knowledge. Knowledge needs to be stored, so that it can be used and re-used to support organisations in achieving their goals (Heiman and Nickerson, 2002). Olivera (2000) states that knowledge can be spread throughout an organisation, including in the information systems and in different units. Organisations therefore need to find ways to ensure that their knowledge reservoir is sustainable, without reducing the need for content updating. Formation of organisational memory *(See Figure 6)* starts from the acquisition of knowledge, which is then stored in knowledge reservoirs. While the organisation needs to ensure its easy and timely retrieval, the memory content itself needs to be maintained and updated over time to reflect organisational dynamics.

Figure 6. The Processes of Organisational Memory
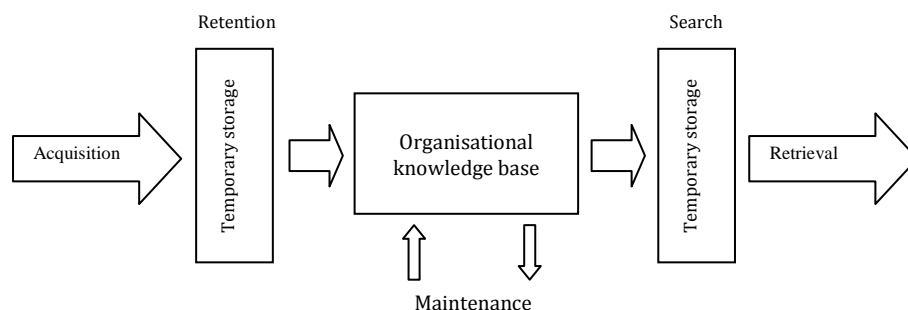
Source: Stein (1995)

On the other hand, in order to ensure that the process of transferring knowledge and information taking place in organisations efficiently, Wijnhoven (1999) asserts the need to have 'organisational memory control', especially in environments where there is a high degree of division of work. While the division of work may lead to effective performance of activities, it may potentially dissipate the unity of efforts to achieve organisational objectives. However, there are two categories of OM controls, namely assets and competencies. While assets can be controlled through law and organisational ability to influence the

environment, the competencies attached to people are controlled by owners or principals or through the organisational values and norms (Wijnhoven, 1999).

4.3.2. ROUTINES AND COMPETENCE DEVELOPMENT

There is agreement on the importance of memory in supporting organisational competence, especially related to the building up of 'know-how' memory, as an essential source of organisation's competitive advantage (Prahalad & Hamel, 1990, 1996; Wijnhoven, 1999; Heiman and Nickerson, 2002). Moreover, memory plays a primary role in achieving organisational effectiveness and reinforcing processes of learning and adaptation, which all in turn crucially affect change (Duncan and Weiss, 1979; Stein, 1995).

Figure 7. Competence and Organisational Memory
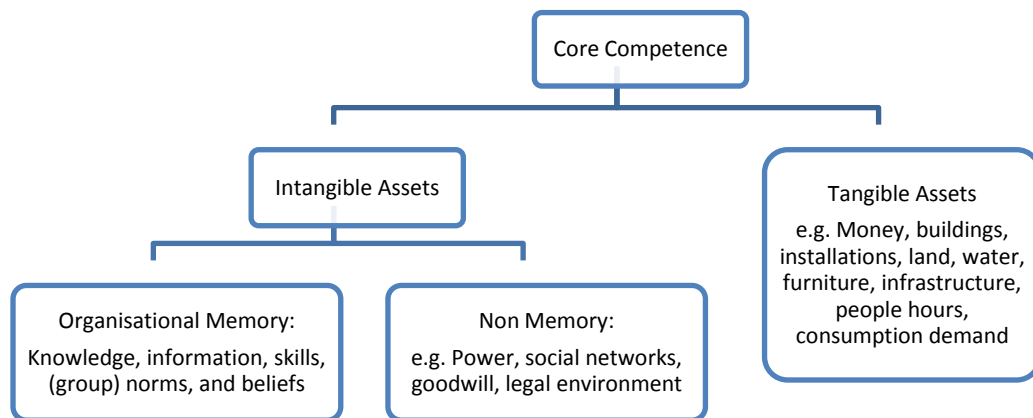
Source: adapted from Wijnhoven (1999, p.4)

The congruence point between competence and OM is routines, as a form of individual habit, which take place in organisations (Dosi et al., 2000). Routines start with people engaging in particular things, contemplating them and accordingly repeating similar patterns or conducting similar things (Feldman, 2000). Similar to habits, routines represent 'patterned sequences of learned behaviour' (Cohen and Bacdayan, 1994). Their nature is recurrent, which means that they occur persistently over time; therefore, strongly adhered to routines might possibly hinder organisations from changing (Gersick and Hackman, 1990; Cohen and Bacdayan, 1994; Winter, 2003; Becker et al., 2005). However, unlike

habits, routines involve an interaction between individuals in the organisational context, which makes them dynamic.

The repetitive nature of routines entails competence being built over time and through memory (Nelson & Winter, 1982; Levitt and March, 1988; Dosi et al., 2000; Becker, 2004). In this sense, David (1997) maintains that the way competencies change is commonly path dependent; in the Resource-Based View (RBV), an organisation is embedded within its history, which uniquely contributes to how an organisation accrues resources (Dierickx and Cool, 1989; Barney, 1991). Thus, it is unlikely to find two organisations possessing similar resources, as they have different histories (Dierickx and Cool, 1989). Through the learning process, organisation-specific experiences and resources are accumulated and stored as knowledge. This knowledge is stored in the organisational memory and may potentially become tacit knowledge, as organisations use and reuse it (Lei, Hitt and Bettis, 1996). The process of use-reuse of knowledge is argued to be dependent on organisation's previous experience or historical path, as organisations try to meet their future needs (Carlile and Rebentisch, 2003). Over time, the continuing process of accessing and deploying knowledge contributes to the development of core competences.

Furthermore, experience and organisational history are crucial in constructing an organisation's identity, which is relatively permanent because it is attached to the history; permanent identity would preserve organisations from adapting to the external environment (Gioia, Schultz and Corley, 2000; Albert & Whetten, 2004). Nevertheless, identity is important to support change and organisations need to be able to undergo organisational change to 'preserve identity' (Gagliardi, 1986; Dutton and Dukerich, 1991; Hatch & Schultz, 2004).

In this contradictory context, it is important to differentiate between 'an enduring identity and an identity having continuity' (Gioia, Schultz and Corley, 2000). This means that an organisational identity can have continuity and hold the same core beliefs and values over time. The question arising here is how those core values and beliefs are understood and interpreted over time. Thus, a comprehensive

70

understanding of the historical, cultural, political and structural context of an organisation, as well as the nature of their core business is essential (Pettigrew, Ferlie and McKee, 1992; Hamlin et al., 2000).

Finally, as an identity develops through embodied history and experience, and as OM is the storage of these experiences and inherent in an organisation's history, so organisational identity forms within and through its memory. Therefore, organisations need to maintain their memory and evolve with it, in order to preserve their organisational identity (Weick, 1979, 1991; Stein, 1995).

This chapter underlines the apparent effect of organisational competence and memory in directing organisational change. Furthermore, analysing and understanding this effect will help in exploring the direction and level of changes that GP practices have followed after the QOF scheme was introduced, and why such changes have been made. The next section provides a link between the theory and how this study tries to achieve its aims and answer the key research question. The section discusses the formulation and development of the research propositions which guide the research methodology and field work of this study.

4.4. PROPOSITION DEVELOPMENT

4.4.1. ORGANISATIONAL MEMORY AND STRATEGIC CHANGE

A set of routines represent organisational procedural memory and hence can be described as a memory repository (Miner, 1991; Adler, Goldoftas and Levine, 1999; Feldman, 2000; Becker, 2004; Tsai, Lin and Chen, 2010). Therefore, routines can be used to explain the phenomenon of change as an organisational object (result) and an organisational process (activity) (Pentland and Reuter, 1994).

However, organisational capability resides within organisational memory which, in turn, constitutes competence (Nelson & Winter, 1982; Winter, 2003). Where this memory is highly articulated, as in case of routines, organisational capabilities are often pronounced (Tsai, Lin and Chen, 2010). The nature of repetitiveness in organisational routines enables individuals and organisations to become competent and skilful at particular activities or tasks which in turn, may increase efficiency (Cohen and Bacdayan, 1994). Moreover, the institutionalisation of knowledge, values and systems in organisations are strengthened by routines, which build competence and hence constitute organisational strengths (Wernerfelt, 1984; Rumelt, 1991; Hawawini, Subramanian and Verdin, 2003).

In UK primary care, GP practices have been working under QOF since 2004. There are long-standing practices, which have been in the industry for many decades whilst others are newly established. Over time, practices might develop their capabilities and thus, improve the way they responded to QOF. On the other hand, practices with a long working history might have been able to respond better to QOF when it was first introduced.

This research attempts to find out how the direction of change has been influenced by organisational memory of core competencies within the context of QOF. For that reason, this thesis adopts the first working hypothesis that *the more a GP*

practice is involved in procedural memory (routines), the more likely it will be competent to implement changes in response to QOF (H1).

Organisational strategy can be emergent in a way that organisations might need to pursue unplanned strategic direction in order to adapt to changes in the external environment (Mintzberg, 1978; Shortell, Morrison and Robbins, 1985; Shortell & Kaluzny, 2006). Substantial drivers for change can include perceived performance gaps, identity gaps, adapting to changes in the external environment, such as government policies and advancement of technology (Shortell, Morrison and Robbins, 1985; Hurst and Zimmerman, 1994). Moreover, the process of internal and external environmental scanning contributes to the construction of organisational memory (Aguilar, 1967; Daft and Weick, 1984; Wijnhoven, 1999). Change itself may involve a process of re-creation and re-orientation of strategy that reflects substantial adjustments in strategic direction (Nadler and Tushman, 1989). In this sense, it is also essential to understand that each organisation possesses a paradigm that is built through their collective past experiences and represented through their beliefs and assumptions. This paradigm serves as a framework of reference and affects their ways of understanding and determining strategic direction. It is argued by Johnson that only by external stimuli is an organisation able to trigger such process as a learned response. This also implies that within the same environment different organizations might respond differently to the external stimuli (Johnson, 1987, 1992).

This learned response can be either a preventive action, which is planned or an emergent reaction to changes (Nadler and Tushman, 1989; Wilson, 1992; Iles and Sutherland, 2001). From this, it can be inferred that although strategy might be started as a deliberate process, as organisations try to accommodate the dynamics of the environment, planned strategy might be gradually altered. Johnson argues that the strength of the paradigm can alter the way the environment is perceived to the point that "strategic drift" occurs, and eventually a crisis point is reached – that some organisations may not survive. The point there is that all organisations see themselves as responsive to change: the question is whether they perceive the need for change accurately enough to change sufficiently, and quickly enough to survive and prosper.

The notion of time is therefore important in understanding organisational strategy, as it deals with how, and to what extent, the present strategy corresponds to an organisation's preceding strategies and whether it will prevail for future strategies (Shortell, Morrison and Robbins, 1985; Pettigrew, 2002). This has dual implications. Firstly, there is no shortcut to achieving organisational objectives. The time lag between the implementation or process stage and the expected outcome demands that organisations think proactively about what they are going to achieve. Secondly, strategy often follows pathways, which means that changes in strategy are influenced by previous experiences. Organisations often take into account stories about success and failure when they develop new directions.

Despite the importance of strategy setting, there is little empirical research on the relationship between organisational memory and strategy, especially in healthcare. This also applies to the context of QOF. Research indicates that organisations make adjustments or change their systems, in this context, but it is less clear how QOF affects the strategies of practices. As a working hypothesis this study assumes that *the more GP practices are aware of previous failures and successes and the more they integrated knowledge into their organisational memory, the more able they are to develop an organisational strategy in response to QOF (H2).*

It is expected that findings of this study will show practices to have employed their organisational memory to recall their strength and weaknesses through experiences or narratives. Organisations recall their knowledge of what has happened and use their organisational memory to learn about their strengths or competences, as well as their weaknesses to guide their decisions. Therefore, the development of strategy very much depends on organisational competence (Prahalad & Hamel, 1990,1996).

Although notions of strategy are central to research in a business context, it is also possible to apply some of these to the public sector, particularly in primary

healthcare. While private sector organisations tend to build their strategies on the basis on their strongest competence to survive in business, the way GP practices conduct changes in their systems, as reviewed in chapter 3, follows different patterns. In the case of UK QOF, practices tend to be partially driven by external policies, which are imposed on them (Campbell, McDonald and Lester, 2008; Crosson et al., 2009; Damberg, Raube and Teleki, 2009). However, it is unclear how existing competences influence strategic decision making when practices respond to such policies. One of the aims of this study is to explore whether GP practices address routines in their narratives, and in what ways, and whether they use recall of organisational memory to evaluate core competences in drawing and developing their strategy to respond to QOF.

> ***Analytical Proposition: 1***
>
> ***Organisational memory of core competences in GP practices shapes their organisational strategies in response to QOF.***

4.4.2. MEMORY AND ORGANISATIONAL STRUCTURE

Chandler argues that 'unless structure follows strategy, inefficiency results'(1962). Furthermore, the 'fit' between strategy and structure is immensely important to ensure effective performance, especially in the context of organisational change (Chandler, 1962; Miles et al., 1978; Hardy, 1996; Morgan, 2006). This argument potentially overlooks the possibility that organisations may unconsciously engage in a new strategy, and that takes place when 'strategy grows out of structure and in turn may lead to its modification' (Hall and Saias, 1980; Burgelman, 1983). For the purpose of this study, it is not important whether change is internally or externally driven. However, it is important to stress that structure and strategy need to be aligned for change to be effectively implemented (Shortell, Morrison and Robbins, 1985; Lukas et al., 2007; Roberts, 2007; Burke & Litwin, 2008; Wasserman, 2008).

Organisational structure is more than a static entity representing a 'planned network', which deals with activities, players, and processes in the network (Hall

and Saias, 1980). Structure is built through dynamic processes which blend historical force and management decisions, as a part of a broader process of organisational memory creating (Walsh and Ungson, 1991). This dynamic process also reflects the complexities embedded in structures, and complex structure is a characteristic of healthcare organisations (Zinn and Mor, 1998; Plsek and Greenhalgh, 2001; Begun et al., 2003).

Elements of organisational structure include specialisations/differentiation, formalisation/standardisation and authority, which is closely related to distribution of power and centralisation/decentralisation in decision making (Bazzoli et al., 1999; Shortell & Kaluzny, 2006; Aldrich, 2007). The interaction between actors managed under a structure reflects 'the political hierarchy', representing the dynamics of power relationships and dependency amongst them (Hall and Saias, 1980; Hardy, 1996; Burke & Litwin, 2008). While power can stem from both formal and informal sources, it gives power holders control over decision making processes (Pfeffer, 1997; Alexander et al., 2006). This leads to the notion of centralisation, which shows 'the nearness of decision making authority to the topmost level of the organisation's hierarchy', and it reflects the direction toward aggregation of autonomy (Huber, Miller and Glick, 1990; Peckham et al., 2007) . In the healthcare context, the degree of centralisation becomes an intense topic of discussions, especially from macro policy perspectives (Bankauskaite & Saltman, 2007). In the UK, for example, there is a tendency towards decentralisation with regard to control inputs and processes of healthcare delivery; yet, at the same time, the government tends to centralised outcome measurements, which are required through performance targets and regulations (Peckham et al., 2007).

For the purpose of this study, the analysis of organisational change and memory focuses on specialisations/differentiation and formalisation/standardisation. Differentiation refers to the degree of specialisation in organisations, which relates to how the work system is divided into subsystems, reflecting the organisation's value chain (Lawrence and Lorsch, 1967; Porter and Millar, 1985). In healthcare organisations, this is exemplified by providing different types of

services, such as different clinics for chronic heart diseases or diabetes (Luke, Begun and Walston, 1994; Bazzoli et al., 1999). As organisations maintain different units with specialised tasks or functions, one challenge becomes how to integrate the various specialised tasks, functions, knowledge, departments or units to seamlessly achieve the strategic objective of the organisation (Lawrence and Lorsch, 1967; Aldrich, 2007). Integration is an essential component of successful transformations in healthcare organisations, as it acts as a 'bridge' between different organisational units and supports alignment between organisational systems (Bazzoli et al., 1999; Lukas et al., 2007).

Specialisation denotes the degree to which specific knowledge and capabilities are used and reused in a particular task (Favela, 1997; Fiedler and Welpe, 2010). It implies that a higher degree of specialisation contributes to increasing levels of knowledge being owned by individuals (Postrel, 2002; Argote, McEvily and Reagans, 2003). This perspective is closely linked to cybernetic models of organisational memory, which assert that one of the key aspects of robust design of organisational memory is the division of work, which allows individuals to be specialised (Simon, 1997). Division of work or learning enables individuals to focus on particular field or problems, to which they can specifically direct their knowledge and effort (Wijnhoven, 1999). Specialisation leads to the development of organisational competence, as knowledge and skills are accumulated and used intensively. Thus, this research believes that *the higher the degree of specialisation a GP practice has, the more competent it becomes at hitting the QOF targets (H1).*

On the other hand, one notable disadvantage of division of work or specialisation is that it might lead to fragmentation of knowledge or memory (Wijnhoven, 1999). Specialisation contributes to memory development and it should be balanced with sharing of information so that an organisation is able to achieve its objective collectively (Argote, McEvily and Reagans, 2003; Fiedler and Welpe, 2010). In order to ensure that individuals work together in an organisation,

mechanisms of integration are required, to guide how information can be channelled and knowledge shared.

Specialist knowledge in organisations can be coordinated through formalisation, which deals with procedures, rules, roles and the standard operation of the procedures (Zinn and Mor, 1998; Aldrich, 2007). Formalisation makes it possible for an organisation to maintain control over activities and people as they grow. Formalisation is also a devise for 'standardising patterns of behaviour' (Katz & Kahn, 1978), which may result in less variety of expected results in operations.

With regard to the aims of this study, the issue of formalisation relates to two issues. First, there has been a long-standing debate on whether organisations should emphasise formalisation or standardisation. While it helps to reduce variations and guide people's behaviour (Stinchcombe, 1965; Mintzberg, 1979; Fredrickson, 1986; Fiedler and Welpe, 2010), formalisation also reduces flexibility, which may lessen the ability of organisations to adapt to change (Glisson and Martin, 1980; Burns & Stalker, 1994; Wally and Baum, 1994). Sine, Mitsuhashi, and Kirsch (2006) allege that both ideas can be true, in the way that once organisations are large and tend to be bureaucratised, it is important to maintain flexibility by reducing formalisation. However, the situation is reversed when organisations are newly established as they require procedures, rules and roles in place to ensure that operations run smoothly. In healthcare, ensuring high quality service delivery is a priority for organisations. However, this requires a degree of formalisation in order to lessen deviation or variation in quality of services, which has side effects including redundancy of tasks (Marchment and Hoffmeyer, 1993; Munkvold, Ellingsen and Koksvik, 2006).

Second, formalisation also reflects important parts of organisational memory, especially how organisations store the knowledge of how things work through rules and procedures. The availability of written rules and procedures in organisations serves as a form of knowledge reservoirs (Walsh and Ungson, 1991; Moorman and Miner, 1998; Wijnhoven, 1999). People can refer to those documents and extract information and knowledge that is readily available for

them to use and reuse as part of the organisational memory. Although excessive use of rules and procedures can be disadvantageous to organisational change processes, they also help people to learn and share information with those who have less competence in particular subjects. Based on this premise, this research believes that *the more specialised a GP practice, the more emphasise it places on rules and norms, to ensure knowledge sharing (H2).*

As well as dimensions of organisational structure, contextual variables need to be considered in analysing organisational structures. Size is claimed to be important in determining how an organisation should be structured to best fit the external demands from the environment (Hall, Johnson and Haas, 1967; Dalton and Kesner, 1983). Larger organisations will be more complex, which means that they would make a greater effort to achieve integration and coordination (Robbins, 1990). Size will also moderate the effect of formalisation in the structure (Meyer, 1972, as cited in Pfeffer, 1982). Hence, this research considers that *the larger a GP practice, the more formalisation to standardise behaviour there will be (H3).*

To sum up, organisational structure plays an important role in both changes and memory. While it functions to guide interactions and flow of information, people, and tasks within an organisation, the structure itself also contains 'stories' that serve as a memory. The way structure is arranged may affect the ability of an organisation to conduct change, as well as how effectively it channels information and knowledge to enhance organisational competence. Specialisation, supported by an appropriate degree of standardisation or formalisation, allows practices to build competencies. However, the way practices do that can differ from practice to another depending on their organisational scale.

> *Analytical proposition: 2*
>
> *More structured and organised GP practices are better able to enhance their organisational memory and competencies to hit QOF targets.*

4.4.3. COMPETENCE AND LEVELS OF CHANGE

The literature in strategic management argues that the existence of (core) competence is critical in determining an organisation's direction (Prahalad & Hamel, 1990, 1996; Barney, 1996, 2001). Further, the mutual interplay between resources and skills embedded in organisations builds organisational competence, and in turn shapes the strategic direction of the organisations (Prahalad & Hamel, 1990; Hill & Jones, 2009). As organisations pursue their strategies over time, this strengthens both their resources and skills. However, organisational strategic direction is reflected through strategic level change which could take place at both operational and strategic organisational levels (Wilson, 1992).

Referring back to the notion of the complexity of healthcare organisations, changes may require healthcare organisations to adjust their strategy and structure by differentiating and specialising in certain aspects of clinical care (Koeck, 1998; Plsek and Greenhalgh, 2001). In doing that, organisations need to direct their strategic orientation to what they are competent in and this can strengthen their efforts to achieve organisational objectives (Aimé, 1997; Prahalad & Hamel, 2006).

As well as the analytical proposition suggested above, these discussions also assume that organisations change in the direction that suits their (core) competence. However, as (core) competence shapes an organisation's strategic direction, then it can be inferred that this reflects strategic level change. On the other hand, strategic level change requires or is followed by structural rearrangement and modifications (Wilson, 1992). As this research tries to explore the idea that QOF has pushed organisations to adjust or shape their strategies, which potentially means strategic-level change, combining both ideas, it will be interesting to find out whether owning (core) competence determines in how much depth the changes in organisations has been carried out. In other words, this research tries to investigate whether organisations lacking core competence will only undergo superficial changes or whether possessing (core) competence change

leads to a strategic level of change, which is followed by structural rearrangements. Based on this idea, the second analytical proposition was formed.

> *Analytical proposition: 3*
>
> *GP practices respond to QOF by pursuing strategic-level changes.*

4.5. THE CONCEPTUAL FRAMEWORK OF THE RESEARCH DESIGN

QOF was initiated by the UK Government through the *new* GMS contract, in order to improve the quality of healthcare delivery. It attaches financial incentives to performance of services, which forms part of a practice's income. Previous studies have suggested that the implementation of QOF compels practice organisations to make adjustments to strategic decisions, such as expanding the number of staff. However, there is a lack of evidence to show why and how GP practices adopt certain changes or how such changes relate to their existing competences.

The literature demonstrates that the construction of (core) competence involves elaborations on tangible and intangible assets, such as knowledge embedded as organisational memory. Organisational routines that take place in organisational day-to-day activities, and are stored as knowledge can become the source of the unique competence of organisations. Yet, the development of these competencies must be supported by other elements, such as organisational structure, which aids the coordination of resources; organisational norms and beliefs that standardise the behaviour; and organisational identity that strengthens and binds the organisation as a whole. The interplay of these elements over time constructs the organisational competence.

In a mutual relationship, while competences determine the strategic direction of an organisation, organisations might need to direct their strategic objectives orientation to what they are competent in, in order to achieve their organisational objectives. A high level of change, which mainly takes place on the strategic

level, might require structural rearrangements. The QOF literature reveals that GP practices have gone through different structural adjustments to accommodate QOF work. However, the factors which influenced the practice decisions to make such changes and the depth of the changes, is still poorly understood. In addition, whether the adjustments and changes fitted with the practices' organisational strategy is not yet known. This research attempts to explore the phenomenon of change in terms of level and direction of change. More specifically, in order to deeply explore the impact of the QOF scheme on GP practices, this research aims to determine the influential relationship between organisational memory and competences, organisational strategy and organisational structure.

Figure 8. The Impact of QOF on GP Practices
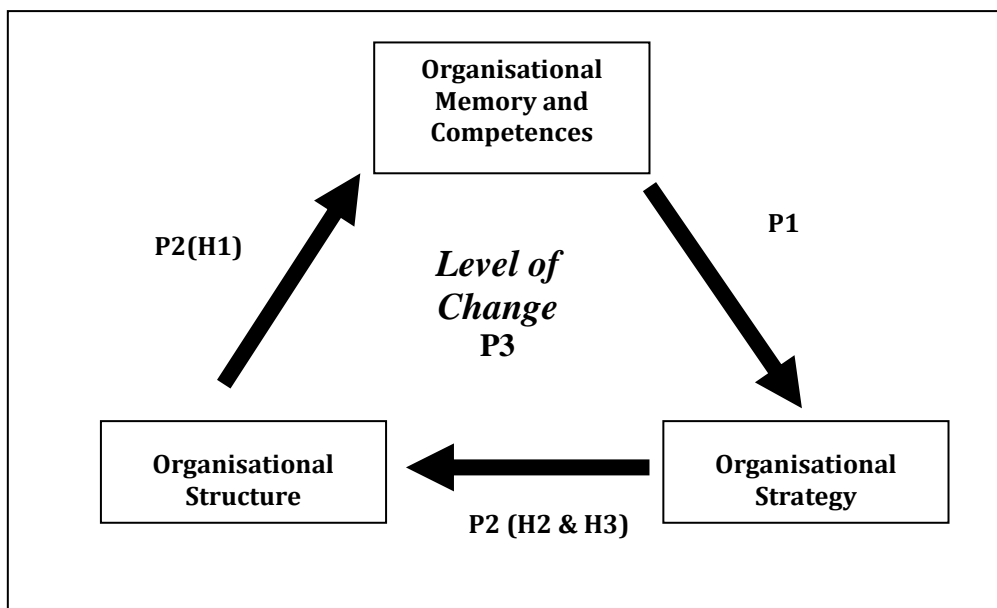
4.6. CONCLUSION

This chapter provided a review of the literature along with the development of the analytical propositions used to guide the thesis. It started by discussing how health care organisations can go through a series of changes to improve the delivery of their services. Three main propositions were developed, through five working hypotheses. These hypotheses were delineated based on two main bodies of theory used in the research: (1) organisational change and (2) organisational memory (OM). To add to the comprehensiveness of discussions, organisational elements which are closely related to both organisational memory and change were also discussed to enrich and strengthen the arguments.

CHAPTER 5

RESEARCH METHODOLOGY

5.1. INTRODUCTION

The previous chapters set up the groundwork for justifying the importance of this research. Chapter 2 and Chapter 3 brought a comprehensive view on P4P from both policy and empirical perspectives. Chapter 4 provided a theoretical background and analytical propositions development, focusing on the dynamics of organisational change and organisational memory and competence. These chapters together framed the rationale for the research design and methods used in this study.

This chapter outlines methods used to approach this research. The chapter has two main objectives. Firstly, it reviews the main research question and the propositions and summarises key points from the theoretical background and findings from a systematic review. Secondly, a research design and methodology are discussed, with details of the case selection, data collection and data analysis employed.

5.2. RESEARCH DESIGN AND METHODOLOGY

Having worked as a healthcare professional, the researcher had been able to observe how individual professionals were motivated by various factors, including financial ones. This initial curiosity encouraged a review of the further literature and the discovery that P4P was becoming a growing phenomenon in the healthcare sector. Then, a more robust and systematic review of the literature was conducted, in order to gather evidence on the impact of P4P on organisational change in primary care contexts.

However, in organisational research contexts, research can be implemented using different approaches such as case studies, ethnography, experiments, action

research, historical analysis, surveys and archival analysis (Easterby-Smith et al., 1991; Silverman, 2005; Yin, 2009). Choosing the appropriate research design approach is determined by: (1) the type of research questions developed by the researcher; (2) the extent to which researcher controlled the events being studied; and (3) whether the phenomenon of the study is contemporary or based on historical events (Yin, 2009).

This study aims to explore how and why GP practices have changed after QOF. 'Why' and 'how' questions are explanatory in nature, and need deeper operational links along the time frame than intensities or frequencies of events on their own. Such questions can be answered through different research designs, including case study, history, or experiment (Yin, 2009). However, case study is described as being particularly useful in understanding contemporary phenomena because it focuses on 'dynamic presents within single settings' (Eisenhardt, 1989; Yin, 2009). A case study is also considered to be as a suitable research design when empirical research and theory are still in their development phase (Bensabat, Goldstein and Mead, 1987; Darke, Shanks and Broadbent, 1998). Accordingly, as changes are still taking place and an in-depth investigation of the impact of QOF on GP practices is needed; furthermore, and perhaps more importantly as core competence(s) and organisational memory are rarely discussed in primary care settings, this study has adopted the case study design as its research strategy. The study followed the approach in (Yin, 2009), which proposes five main phases in conducting case study research :

1) Establishing the study question(s)
2) Put forward any propositions
3) Determine the unit(s) of analysis
4) Conduct the logic linking the data to the propositions
5) Set up the criteria for interpreting the findings.

5.3. CASE STUDY RESEARCH DESIGN

Based on a review of the literature on P4P in primary care settings, there were relatively few studies attempting to explore how the changes introduced in GP practices since the start of QOF had been undertaken, or what factors contributed to these changes and there was no clear evidence to support any findings. More importantly, it is noted that there are no studies that report the level and the direction of changes that were made because of QOF, or discuss the role of organisational memory and competence in conducting such changes. Consequently, the main research question is *how and why does organisational memory contribute to the development of organisational competence in GP practices, and how do these competencies affect organisational change in such practices?*

In order to answer the research question, the literature review in Chapter 4 produced three main analytical propositions *(See Page 72),* which were developed through working hypotheses, based partly on empirical evidence of P4P, and partly on theories of organisational change and memory. These propositions are:

> *(1) Organisational memory of core competences in GP practices shapes their organisational strategies in response to QOF;*

> *(2) More structured and organised GP practices are better able to enhance their organisational memory and competencies to hit QOF targets; and*

> *(3) GP practices respond to QOF by pursuing strategic-level changes.*

Before starting data collection, and to ensure that the propositions would be supported, it was necessary to determine which type of case study would be employed. In order to do that, this study originally expected to find similar results to previous work (literal replication) (Yin, 2009). For example, it was reported that after 2004, most GP practices installed new IT systems and increased their

staffing levels. However, after the research framework and working hypotheses were formulated, it was expected that this study would also come out with new findings (theoretical replication) (Yin, 2009). On the other hand, strategic organisational change requires changes throughout all organisational levels and subsystems. Hence, this study has adopted multiple embedded case studies.

After choosing the type of case study, the practice organisation was selected as the unit of analysis for this research, because the focus is on organisational level changes.

5.3.1 SAMPLING METHOD

Research in qualitative studies tends to employ purposive sampling methods (rather than randomly selecting), by seeking out groups or individuals or settings that are able to provide comprehensive information on certain research issues (Eisenhardt, 1989; Denzin & Lincoln, 2005; Stake, 2005). As this method is mainly based on the researchers' judgment and their understanding of the key themes and contexts of the research, it helps to select the inclusion criteria of the study. Purposive sampling also enables researchers to engage in depth in context-fit and information-rich cases (Patton, 2002; Stake, 2005). Hence, purposive sampling was considered appropriate for unveiling the phenomenon of change in organisations in this research. More specifically, employing purposive sampling allows intentional identification and selection of samples, i.e. GP practices, which were perceived to be able to provide rich and in depth information on the question under investigation.

5.3.2. NUMBER OF CASES INVOLVED

Qualitative research needs to have enough cases to reach theoretical saturation and answer its research question(s) satisfactorily (Lincoln & Guba, 1985; Eisenhardt, 1989). While there are no clear-cut rules for selecting the number of cases, 4 to 10 cases are considered to be enough for a multiple-cases study (Eisenhardt, 1989). In addition, a review of the evidence on P4P, particularly on QOF, showed that most qualitative studies were based on 2 to 4 cases. For example, Checkland et al (2007) conducted a qualitative study using two GP practices representing a big and a medium-sized practice, to evaluate the social effects of new data collection systems in the UK. McDonald et al (2009) employed two practices comprising 12 GPs, 9 nurses, 4 HCAs, and 4 administrative staff, to evaluate the impact of healthcare service reforms. Meanwhile, Grant et al (2009) chose to have 4 GP practices; 2 in England and 2 in Scotland as sources of information for the research. Based on this and a consideration of the cost involved and data to be analyzed (Miles & Huberman, 1994) it was decided to collect data from four GP practices.

5.3.3. SELECTION OF SAMPLES: INCLUSION CRITERIA FOR CASES

In order to address the research question(s) and the propositions clearly, the cases for any multiple case study should be selected carefully to ensure that selected cases are good representatives of the population under investigation, which in turn minimises bias (George & Bennett, 2005). This implies the need for inclusion criteria; in this study, although participation was entirely voluntary and the willingness to participate was the main concern in the data collection phase, the following criteria were considered before approaching the participants:

1. **Large practice size.**

   In UK primary care settings, studies demonstrate the use of GP practice size, associated with the number of patients being served annually (Bower et al., 2003; NHS_The_Information_Centre, 2006; Wang et al., 2006). The

Information Centre categorisation of practices has defined a large size practice as a practice that serves more than 8,000 people.

This criterion is based on the idea that large practices often have a better organisational performance and outcomes, which reflect well-structured and organised practices (Conrad et al., 1988; Zinn and Mor, 1998), and this may become a signal for better technical facilities and more substitution of clinical tasks by non-GP health professionals (Wensing et al., 2009). The literature review reveals that larger practice sizes were generally associated with readiness to implement P4P schemes (Damberg, Raube and Teleki, 2009). Furthermore, the different sizes implied different ways of managing change (Grant et al., 2009). This reflects the capacity and resources owned by organisations in delivering services to patients, such as the use of IT or more clinicians (Sutton and McLean, 2006; Landon and Normand, 2008).

Altogether, this study assumed that larger practices represented actualising organisational memory and established distinctive competence(s) that enable more flexibility in responding to change. Moreover, this research assumed that similar size practices had relatively similar capacities and resources, so that the information obtained from them was expected to be relatively comparable.

2. **QOF score.**

Each year, the NHS issues a report on QOF scores obtained by GP practices. This research included GP practices that had very high QOF scores and had maintained their scores for 4−5 years. Including such practices may generate insights about best practices or good performers, as it potentially showed that they have been able to cope and adjust to changes.

3. **Socio-demographic characteristics.**

Location, resources, and interdependence are also contextual variables for organisational structure (Robbins, 1990). The review of the literature reveals

that socio-demographic characteristics may have a significant impact in achieving QOF targets; see for example (Guthrie, McLean and Sutton, 2006; Gulliford et al., 2007; McGovern et al., 2007; Gravelle, Sutton and Ma, 2009) . To ensure that all practices have the same opportunity to obtain equivalent QOF scores, practices from the same geographic area (under the same PCT) and which serve population with the same socio-economic characteristics were included in this study. This study assumed that practices operating and sharing similar areas of operations would have patients who shared similar characteristics.

5.4. DATA COLLECTION

5.4.1. SELECTION OF PARTICIPANTS

Previous studies in this area suggest that about forty participants should be sufficient to generate the desired information (Campbell, McDonald and Lester, 2008; Maisey et al., 2008; McDonald et al., 2009; McDonald and Roland, 2009). This study aimed to recruit between ten and fifteen participants from each practice including GPs, nurses, other healthcare professionals, administrative staff and practice managers.

Participation was voluntary, and once participant agreed to be involved in the study, consent forms were signed by both the participant and the researcher to ensure that both parties understood the terms of research and to assure them that the research would not breach any confidentiality protocols.

5.4.2. TYPE AND MAIN SOURCES OF DATA

This research utilised triangulation data, which is argued to help researchers in dealing with issues of trustworthiness, completeness of data and bias for subjectivity (Gillham, 2000). Semi-structured interviews with all healthcare professionals (physicians, nurses, and healthcare assistants), practice managers and members of administration teams were considered as a main source of data.

By involving various professionals, it was expected that richer information could be obtained. This was based on the idea that people are a rich source of data as they are 'repositories of knowledge, evidence, and experience' (Mason, 2002), a reflection of research focusing on organisational memory.

Moreover, through the interviews, this study expects to gain in-depth perspectives on the social reality. This is informed by both ontological and epistemological positions in a way that 'discursive constructions of the social or the self' are important in fulfilling research objectives (Wetherell et al., 2001; Mason, 2002). Ontologically, this research believes that people's memory is constructed from their knowledge and experiences, and memory may construct social reality which could be different to what is available in the literature. Epistemologically implies a need to engage in ways that allow a more critical approach to managing and interpreting information collected through qualitative interviews. Mason asserts:

> '' [...] the interview method is heavily dependent on people's capacities to verbalise, interact, conceptualise, and remember. It is important not to treat understanding generated in an interview as though they are a direct reflection of understandings 'already existing' outside of the interview interaction, as though you were simply excavating facts'' (2002).

Using semi-structure interviews means that there were spaces for improvisation. This study developed a thematic interview guideline.[17] The initial guideline was pilot-tested on two GP practices and involved a limited number of interviewees. Both interviewees were key individuals responsible for QOF and their suggestions were very useful in revising and finalising the guideline. As qualitative research involves an iterative process by its nature, the researcher was able to learn about constructing questions alongside the interview processes.

For each theme in the guideline, interviewees were asked to compare between pre and post QOF, if the interviewee could not remember, or was new to the practice, then she/he was asked about the changes and pattern of changes as far as she/he

---

[17] For full interview guideline and the main theories behind the development of the themes used in the interviews see Appendix 3.

could remember. On this basis, interviews were conducted through open questions using broad themes; the researcher was not restricted to a strict list of interview questions. Open questions were used as a way to recalling practice-specific knowledge and experiences in implementing QOF and changes that took place in the practices. This meant that as the researcher's understanding of the field developed, the interview questions adapted and new questions emerged. For instance, the findings and understanding gained from the first three or four interviews in each GP practice were considered as input for the following interviews, both in terms of the questions asked and who was asked. Trustworthiness was established by triangulation of data sources and by asking interviewees to comment on emerging issues. This allowed the researcher to obtain richer and more in depth information about the impact of QOF on each practice. This process could serve as a way to ensure the validity and reliability of information for further analysis. However, the questions were constructed to be as objective as possible and not to offend the interviewee by asking for personal information.

To ensure that the quality of the case study was maintained, the research also employed secondary data sources. These sources included updated QOF policies and published practices' information. This was expected to support qualitative information gathered from participants. All information was subject to double-checking and cross-checking to ensure the validity of information for further analysis and to enrich the quality of memory-based information. The extensive and intensive use of QOF document analysis and interviews were the main characteristic of the study.

5.4.3. APPROACH TO FIELDWORK (IN CHRONOLOGICAL ORDER)

The field work for this research started in June 2009. The process started by obtaining ethical approval from the University of York Ethics Committee. As this research is conducted in the area of healthcare and involves participants from the NHS, specific NHS procedures were also required to be followed. Table 12 lists the chronological order of how the research fieldwork was approached[18].

Table 12. Approach to Fieldwork

Time	Activities Done and To Be Conducted	Detailed Explanation
July 1, 2009	Ethical Approval Form and other documents were submitted to the Humanities and Social Science Ethics Committee at the University of York.	Some revisions based on suggestions from the committee were completed.
July 5, 2009	Ethical Approval Application with other documents and submitted to NHS Ethical Committee.	A hearing with the ethical committee was conducted on the 3rd of August, 2009. Minor revisions on the information sheet and consent form were resubmitted.
August 15, 2009	Site Specific Information Form and NHS/HSC R&D Form with other documents were sent to R&D Department.	The approval from R&D dept follows approval from the Ethics Committee.
August 25, 2009	Ethical Approval from University of York was obtained.	
August 24, 2009	Ethical Approval from NHS Ethics Committee was granted.	REC Reference: **09/H1311/67**
October 27, 2009	Once approval from R&D is obtained, formal invitation letters along with a study information sheet was sent to managers of GP practices which meet the inclusion criteria for the study.	R&D Unit Ref: **NYY-P01447** Preliminary contacts with GP practices managers had been made.
October-November, 2009	When initial approval from practice managers was obtained; an invitation letter, a study information sheet, a reply slip, and a stamped envelope to return the slip, were sent for healthcare professional and administrative staff individually.	
November - December 2009	Arrange meeting for interviews.	
November 2009–Aprill 2010	Conducted interviews.	A consent form was signed by each participant before the interviews.
May 2010	Data collection was completed.	

---

[18] For more detail about ethical consideration and ethical approval see Appendix 4.

5.5. ANALYTIC STRATEGIES

The interviews lasted between 40 and 75 minutes, they were fully transcribed and read and re-checked by the researcher, emerging themes were discussed with the supervisory team in regular meetings. The analysis proceeded in parallel with data collection, allowing issues that emerged to be explored in the field.

Following ethics procedures, to ensure confidentiality of data prior to analysis, all means of identification were removed and the data was treated anonymously. Analysing data from case studies involves examination, categorization, tabulation, exploring, and combining of evidence to produce empirical conclusion(Yin, 2009). As an analytical strategy, the study drew on a range of theoretical and conceptual frameworks; this involved arranging the data into several themes. The main idea of framework analysis is "a systematic process of sifting, charting, pattern matching, and sorting material according to key issues and themes" through elaboration of theoretical and empirical issues in the process (Ritchie & Spencer, 1996; Pope et al., 2006). Apart from its common use in healthcare research, framework analysis was chosen based on the idea that it would help to critically analyse and reanalyse the ideas across the different stages of the research, as suggested by the literature (Ritchie & Spencer, 1996; Pope et al., 2006).

The three analytical propositions, developed through several working hypotheses, were also used in this study to guide both the data collection and analysis process. Throughout the process of data analysis, reference to the conceptual framework was maintained to ensure that all important information was collected.

The information collected was also used integratively Elliot, (2006), to construct an organisational level view. As this research aimed to explore how organisational memory contributed to the way in which practices responded to change, the researcher needed to be able to obtain a collective memory, by finding the general pattern from each individual's stories.

To assist in the analytical process, this study used Atlas-ti version 5 (www.atlasti.de) to manage and process the data for analysis. It is a conceptual network builder which allows researchers to manage and analyse large amounts of qualitative data. Atlas-ti as one of the *Computer Assisted Qualitative Data Analysis Software (CAQDAS)* package provides a set of tools that enables coding, ordering, linking, storing and retrieving of data, as well as developing memos and creating conceptual diagrams. In order to benefit from these tools, the researcher participated in two training workshops provided by the University of York. In addition to the ability to run the software, the practicality and the availability of this device became the main consideration for using it in conducting the research.

5.6. LIMITATIONS AND CHALLENGES

In conducting interview-based research, some factors were predicted to influence the effectiveness of the interviews and the guideline against obtaining rich information from the participants. One of these factors was the fact that the researcher came from a different background from the research participants. As the characteristics of the researcher were different from the interviewees, potential limitations and challenges might have occurred such as understanding of contexts; at the same time, being different could also be argued to reduce the degree of bias more than the researcher shared similar characteristics (Galtung, 1969; Brown et al., 1991; Simmons et al., 2000).

In addition to that, the researcher faced various challenges and technical limitations in the research process, these challenges were:

Prior to the data collection process, the main difficulty faced by the researcher was related to finding practices willing to participate. The process itself took more than 6 months to get the first responses. The reasons behind that might be:

a. ***Timing: -*** the process was conducted around the autumn and winter season 2009. It was mentioned by informants that all practices in England always had their busiest time during these seasons, especially winter. It was

characterised with a significant increase in the number of patients visiting the practices, which made it less possible for practices to deal with non-clinical issues, like this research.

b. ***Disease: -*** during that time, the UK faced a significant outbreak of swine flu. Considering its critical consequences on public health, many practices as well as the Government pushed their efforts to tackle this disease. The swine flu was worsening as it entered the winter season.

c. One of the practices mentioned that the partnership responded late because they had to focus their attention towards clinical care (with swine flu and winter) and QOF report development. The QOF report is usually due around March/April each year and the practices were very busy in ensuring that all evidence was recorded in time, to avoid losing points. While they found the research interesting to participate in, their time availability became increasingly limited with their need to obtain and submit the QOF evidence.

However, during the data collection process, most participants welcomed the research on the basis that it would help the researcher in contributing to the potential development of a similar system in his home country. Participants were noted to be open and speak freely on their perceptions regarding both organisational change as well as the QOF policy itself.

5.7. CONCLUSION

This chapter provided the methods used to approach the study. Four GP practices were involved in the research. Data was collected by way of semi-structured interviews. Several strategies were undertaken to ensure that there were no any breaches of ethical conduct. Data analysis was conducted through framework analysis. Finally, the limitations and difficulties of the study were addressed.

The next four chapters present the findings and analyses of the study. The first empirical chapter mainly discusses how practices perceived QOF and organisational changes in general. This becomes a foundation to engage in analyses at more depth in the three chapters that follow.

CHAPTER 6

QOF AND PERCEIVED ORGANISATIONAL CHANGES

6.1. INTRODUCTION

This research study was carried out in four GP practices in non-deprived areas in the north of England. All four practices were managed and worked under the same PCT, which was characterised as the largest geographically PCT in England covering 3,200 square miles and had the third largest population PCT in England, with a relatively high level of deprivation (APHO and DoH, 2010).

This chapter is designed to provide a foundation for further examination of the impact of QOF on GP practices, which will be presented in subsequent chapter. It presents the first part of the empirical findings, focusing on perceived organisational changes in the practices under study. The chapter gives a general description of each practice individually, followed by how each practice responded to QOF as a new payment strategy and presents the changes perceived by organisation staff.

6.2.   PRACTICE A: EMBRACING POSITIVE CHANGES

6.2.1.   GENERAL DESCRIPTION

Practice A was located in a city in the north of England, it was established in 1947. Figure 9 below provides the composition of patients registered at the practice. There were a total of 13,280 patients as of March 2010. The highest number of patients was in the category 35 – 74 years of age.

Figure 9. Age Characteristics of Patients (Practice A)
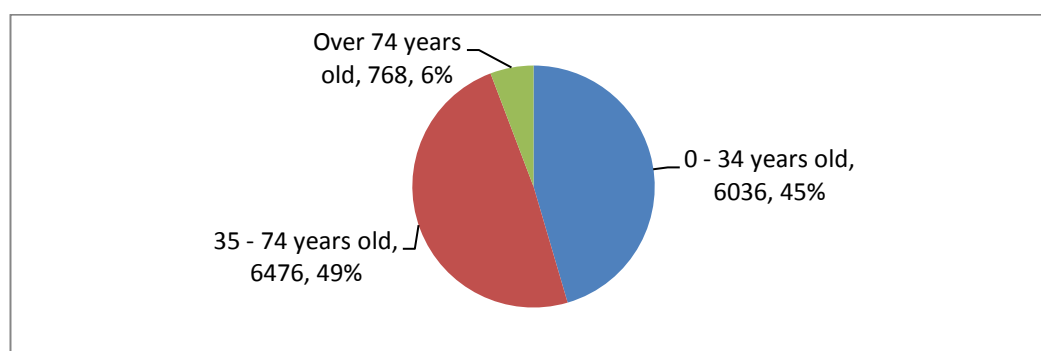
With more than 8,000 patients, this practice was categorised as a large practice (The_NHS_Information_Centre, 2007). To cater for the health care services of its patients, the practice has nine General Practitioners (GPs), three nurses, one health care assistant, two administrative staff and eleven receptionists. Nine members of staff were able to take part in this study *(see Table 13).*

Table 13. The Characteristics of Informants in Practice A

No	Informants	Gender	Professions	Status in Practice	Experiences in Health Care	Years in Current Practice
1	PA.D1	Male	Physician	Senior Partner	18 years	14 years
2	PA.D2	Female	Physician	Salaried GP	16 years	2.5 years
3	PA.D3	Male	Physician	Senior Partner	18 years	18 years
4	PA.N1	Female	Nurse	Practice Nurse	20 years	20 years
5	PA.A1	Female	Admin	Data Management	13 years	7 years
6	PA.A2	Female	Admin	Practice Manager	20 years	9 years
7	PA.HCA1	Female	HCA	HealthCare Assistant	14 years	4 years
8	PA.D4	Male	Physician	Partner GP	18 years	4 years
9	PA.D5	Male	Physician	Salaried GP / Locum	3 years	2 years

The practice intended to provide a personalised health care service for its patients. It claimed to be 'a traditional family doctor service' by emphasising the continuity of care. One of the physicians mentioned:

> *Our vision is to trying to preserve personalised general practice, which is actually what patient's want when you ask them (PA.D1).*

Part of the effort to fulfil patients' needs was done by ensuring that patients got their preferred appointment time. When this was not possible, the practice offered alternative ways to ensure that patients' needs were accommodated.

> *[...] if you can't make an appointment for the patients, then there will be a doctor that you can speak over the telephone. So that I think everybody's here, the staff, secretary, nurses, doctors, practice managers, all are trying to make the best for the patients' needs (PA.HCA1).*

In its attempt to provide better quality service for patients, Practice A had undergone various changes, especially related to the practice location and staff composition. The practice ran its services through two branches in the same city to ensure a wider area of coverage. It offered various health care clinics, including minor surgery, over 75 checks, travel health, babies and children, vaccinations, and chronic disease management clinics, for diseases such as diabetic monitoring, heart diseases and respiratory diseases (Asthma/COPD).

6.2.2. THE QUALITY AND OUTCOMES FRAMEWORK (QOF): THE PERCEPTIONS OF INFORMANTS AND PRACTICE ACHIEVEMENTS

6.2.2.1. PEOPLE'S PERCEPTIONS TOWARDS QOF

According to one senior partner, QOF was initiated as a response to a crisis in recruitment into general practices in the late 1990s, which mostly related to GP workload issues. Some factors, such as long working hours and the financial situation of practices, were perceived to contribute to workload issues.

> *There was a recruitment problem because of the lack of people going into general practices. Practices couldn't recruit. So, there were many practices that really needed four or five*

partners but only had three in post and those three would try to make the practice work then with only three fifth of the money that they needed. So, that's what brought the crisis from the medical point of view. The government did recognise it, but refused to put any more money into the contract or make the alterations, unless they had something that they could measure (PA.D1).

QOF was understood as a performance-related system, which served as a 'device' for the Government to justify funding distribution to primary care practices. It was perceived by informants, in particular partners, as an assurance for the credibility of public funding and as strengthening evidence-based practices. Informants also perceived QOF as a general guideline for clinical care. They believed that QOF led to better clinical care management, especially in terms of keeping patient records and standardising the care. One physician stated:

QOF standardises clinical care. It has actually made us sort of focus on making sure that everyone is getting the same standards, monitoring and investigation, follow up. So that we know that when you see somebody, if they send me anything highlighted, that needs following up. That is made it easier some ways to manage patients (PA.D2).

Although informants understood that QOF aimed to improve health outcomes, less enthusiastic responses emerged following government decisions to impose changes in indicators and allocated points. Some indicators, for example in patient experience domain, were seen not to correlate with clinical care. While the government considered such changes were necessary to reflect the importance of particular clinical or non-clinical conditions; informants tended to perceive it as a deterrent to achieving the maximum QOF points. It was viewed as a political interference, rather than a way to improve clinical care. Moreover, some informants felt it was virtually impossible to fulfil those indicators.

Some of the incentives are the rules that are done for QOF now...are unrealistic. Why?
Not to be able to achieve. There are some figures that are virtually impossible to achieve. I can see the reasoning for it, but sometimes, if you got certain case, say, blood pressure level or certain HbA1C level for diabetic, sometimes are impossible to achieve, as in a group of immobilize obese people (PA.N1).

As a consequence, continues changes in achievement measures led to a situation where health care professionals felt de-motivated to pursue such indicators.

> *They only budgeted to pay us about 75% of what QOF is actually cost. But, we all hit 95 plus, so it costs them more a lot than they budgeted, and they didn't like that. Because of that, they systematically trying to get that back ever since by making it harder, like making very specific by taking some points out, by introducing political aspects to I, as supposed to clinical aspects. So, they introduced the patient survey, which is scientifically unfounded. Statistically, you can't have 80 patients making a valid decision about what the practice with 13,000 patients does (PA.D1).*

In general, the practice's narratives embodied its endeavours to get rid of the factors which potentially decrease their QOF points. Its main consideration was related to QOF contribution to total practice income, which was more than 17%. Therefore, this drove the practice to think about how to sustain or increase QOF points.

> *QOF is more than one sixth of the practice's income, so the size will matter. Income with total turnover for this practice is about £1.5million. So, its 250,000 pound, it is what QOF contributes, so it is a large amount of money. And effectively, QOF is the new money that we've got since 2004, without it, there's no new money on the table. So, if you want new money, we have to work on the QOF (PA.D1).*

Recognising QOF's potential contribution to income-streams, the practice ensured that it had prepared sufficiently in various areas, including human resources. This involved arranging skills training for nursing staff and health care assistants to perform QOF-related work.

> *We rely heavily on the QOF as an income stream for our profits, which means of course for the financial viability of the practice. So, we have to make sure that every year, that our organisation is care to maximise income through the QOF, and that means that we need to make sure that we've got the nursing staff and health care assistant staff qualified and organised in order to make sure we see patients who have relevant illnesses or sometimes things like smoking. We need to ask about smoking [...] it is just got to keep up with all those different things to get the points (PA.D4).*

Robust preparation for QOF resulted in consistently high QOF points for the last 5 years as shown in Table 14; the practice maintained an average of 99% of total QOF points.

Table 14. QOF Score of Practice A

Year	Achievement	Maximum Points	Percentage
2004/2005	1032	1050	98.29%
2005/2006	1047	1050	99.71%
2006/2007	995	1000	99.50%
2007/2008	995	1000	99.50%
2008/2009	978	1000	97.80%

Source: The NHS Information Centre (2010)

However, the practice experienced a slight decrease in the QOF points in the year of 2008/09. Informants confirmed that it had become more difficult to achieve perfect points. They associated the loss of points with a flaw in the method used to assess patient experience.

> *The patient survey was based on a posted survey, answered by 80 patients out of about 13,000. Based on those 80patients out of the 13,000 who answered, we only got 70% 'yes' right, so that we lost £5- 6,000 out of it. It's scientifically flawed (PA.D1).*

As QOF is a performance-based incentive scheme, the higher QOF points obtained consequently means an increase in the amount of financial incentive received by the practice. Accordingly, a decrease in percentage of achievement in points would result in a lower income-stream from QOF. As stated above, the QOF contribution to the practice income was around £250,000 annually, so that a slight decrease in points meant a considerable income reduction. When income was low, it potentially restricted the practice's capacity to deliver a quality service.

6.2.3.   PERCEIVED CHANGES IN THE ORGANISATION: THE RECALL SYSTEM AND RELIANCE ON TECHNOLOGY

Practice A maintained that it already provided services for diseases like diabetes and asthma prior to QOF. However, QOF was perceived to provide better chronic disease management for the practice through the implementation of a recall system. This system was introduced to ensure regular health checks for chronic disease patients, which were done through reminding them of their upcoming consultation appointments. When patients did not make their scheduled appointment, the practice was required to re-call them up to three times, before categorising them as 'exception cases'.

> *There were some chronic disease management clinics pre QOF in the practice for taking care things such as diabetes and asthma, but it wasn't organised very well. Whilst now the recall system [...] within the practice makes it much more organised, it's much stricter, it's pleased, slightly more aggressive. We will go hunting the patients that don't turn up. We'll make sure they get those three letters, and if they don't turn up, then that would be exception (PA.D1).*

For the informants, the recall system urged the practice to be more proactive in approaching patients than prior to QOF.

> *It has clearly got more preventive and proactive. So, I'm no longer dealing with just illness, but I'm also dealing with chronic disease a lot more, as we all are (PA.D4).*

On the other hand, informants pointed out some potential side effects of this system. Regular health checks also meant more frequent visits. Informants believed that this potentially caused inconvenience for patients as they needed to find times to visit the practice at regular intervals. Moreover, inconvenience might also be experienced as a result of more medication prescribed for patients. One physician added that regular visit did not guarantee a continuity of care, in a way that patients tended to end up seeing a different clinician on each visit.

> *The QOF has resulted in more inconvenience to the patients, because they have to come in more often, which is raised our consultation. Our consultation has gone up from three per patient per year to five per patient per year (PA.D2).*

I think the patients are seeing lots of different people, and the continuity of care is less. Also, they end up on many more medications, because the diabetic, they are paid more to make sure that they're on this and that (PA.D4).

Besides the recall system, QOF has required the practice to equip itself with robust information technology to support data management. Hence, patient information became much better documented than before. This system came with the use of templates and protocols that assist healthcare professionals to collect the necessary information and record it in the database system.

The system, it can be good for focus. When you are a GP partner, and the amount of money coming into the practice is not fixed, then with all these organisational changes, and making sure that all the areas are looked at, then it is not difficult to score highly with QOF. So, it is really an organisation thing to make sure that your systems are in the place and make sure that you can score highly on QOF. People are getting very good clinical care before QOF came out, but QOF had made them to do things that are measureable. Things like diagnosis can't be measured by QOF can it? QOF looks at measurable things and with certain system in place, we can make sure that things are being measured and recorded (PA.D2).

Everything is documented and we're doing most of the up-to-date things now. So that the ongoing things each year [...] we are looking for our protocols and how we do things in the practice to improve the service (PA.N1).

Furthermore, clinicians tended to agree that such a system 'standardised' the way they conducted their work as they were bound to follow the templates. Hence, even though they worked separately and dealt with different patients, the procedures were similar and standardised.

[...] the quality is better, because we're all doing the same things, whereas a lot of people are working separately and not doing the same things. We're all tending to try to stick to the same templates, and the computer now helps (PA.N1).

On the other hand, the reliance on the information system to enter patients' data was perceived to create less favourable consequences. While it was beneficial in

providing evidence for performance measurements, it required healthcare professionals to spend time during the consultation entering data. In turn, this affected the way the healthcare practitioners perform their jobs. Issues such as less actual time to deal with a patient's health, longer consultation times and less free time for healthcare professionals were argued to be some of the practical dysfunctional consequences of QOF.

Thus, these findings underline that practice staff had varied views about the QOF scheme and show how QOF affected them in performing their work. QOF was believed to drive the practice to be more focused on chronic disease care and standardised procedures in delivering care. However, informants were also concerned about some unintended consequences of implementing QOF. The use of an IT system with templates and protocols helped in dealing with data management; yet, it also caused disruption in consultation time. Moreover, although the practice's average achievement during 5 years of QOF was very high, there was a notable disappointment on the loss of points in 2008/09. This was believed to be caused by a flaw in the QOF patient experience survey.

6.3. PRACTICE B: A FORWARD-THINKING PRACTICE

6.3.1. GENERAL DESCRIPTION

Practice B had a long history of being a primary healthcare organisation that provided quality healthcare services. Its establishment dates back to before 1920. This practice is located in an outer suburb of a city in northern England. At its initiation, the practice started as a small health care establishment. However, it underwent significant development in the number of registered patients, which now reached over 19,000 patients, covering 50 square miles. This entitled the practice to be categorised as a large practice (The_NHS_Information_Centre, 2007). The largest proportions of patients registered in the practice were those aged 35 – 74 (54% of total patients).

Figure 10. Age Characteristics of Patients (Practice B)
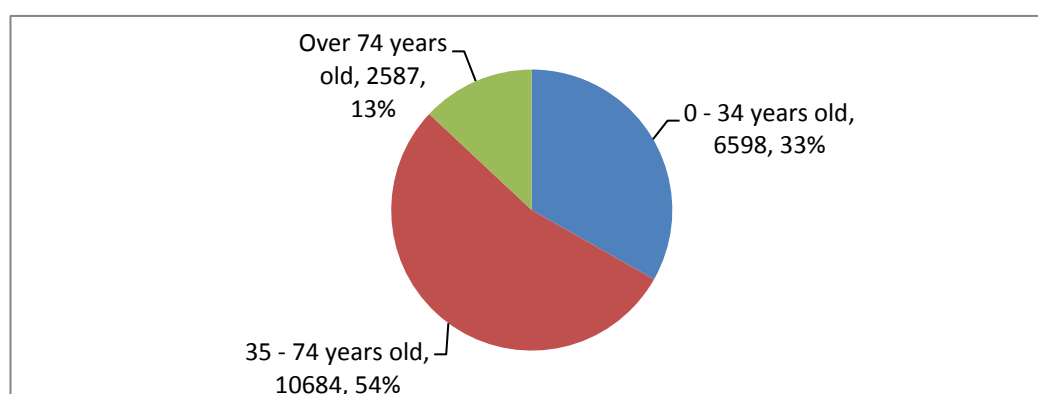
To serve such a considerable number of patients, the practice had a large number of professionals including 13 GP partners, 1 managing partner, 5 salaried GPs, 1 head of nursing, 7 nurses, 4 health care assistants, 1 HR manager, 1 IT manager, 1 audit manager, 1 practice administrator, 1 finance team leader, 2 site leaders, and 25 administrative support staff, comprising receptionists, data officers and secretaries. Amongst the staff, ten professionals participated in this research.

Table 15. The Characteristics of Informants in Practice B

No	Informants	Gender	Professions	Status in Practice	Experiences in Health Care	Years in Current Practice
1	PB.D1	Male	Physician	Senior Partner	20 years	15 years
2	PB.A1	Female	Admin Staff	Audit Project Assistant	15 years	15 years
3	PB.N1	Female	Nurse	Practice Nurse	4 years	2 years
4	PB.A1	Female	Admin Staff	Practice Admin.	11 years	11 years
5	PB.D2	Male	Physician	Partner GP	2 years	1 year
6	PB.D3	Male	Physician	Senior Partner	32 years	29 years
7	PB.A2	Female	Admin Staff	Practice Secretary	21 years	21 years
8	PB.A3	Male	Partner Admin	Practice Manager	8 years	8 years
9	PB.N2	Female	Nurse	Practice Nurse	25 years	10 years
10	PB.D4	Male	Physician	Partner GP	31 years	27 years

Practice B considered itself to be a community-based practice, whose staff had either spent most of their lives in or came from the surrounding area. Researchers define 'community-based practice' differently as it relates to various fields, such as anthropology and sociology, as well as health science. Refer to Heitman and McKieran (2010), Johnson (1998), Eckert and McConnel-Ginet (1992) and Kristjanson and Chalmers (2007). Originally initiated in sociological research, the

term 'community' may represent a sense of belongingness, common symbol systems, shared values, mutual influence, emotional bonds or connectedness, shared needs and commitment to meet the use or a sense of 'us'(Israel et al., 1994). It can also refer to 'a group of people from the same geographic location or catchment area', which provides people with 'recognizable common needs and interests of concern to public health' (Heitman and McKieran, 2010).

> *A lot of us are local, which has a huge impact obviously because. We have had people who've left, who've regretted it because it's, yes they might have a bit more money, they might have a bit more holiday, but they haven't got the people, it's the people that make the practice really, rather than anything else (PB.A2).*

This practice believed that good health care could only be achieved by a partnership between practice and patients. Thus, it was important to involve patients in the healthcare process.

> *We want to give the best service possible and have well-trained staff, give them patient-centred care; make sure the patient has their say as well, because it has to be a contract between us and the patient. It's patient-centred care all the time ultimately. We want to give the best service we can within the budget and within our capabilities really. They should take part in their care. They should have a say in their care (PB.N1).*

This value was widely shared within the practice. Informants acknowledged that the process of health care delivery was not only when patients met doctors or nurses, but started immediately when they met the receptionists in the front office (PB.A1).

> *Patients are paramount, patients are the first port of call, are our priority. We have to, we try and give our patients the care and the quality of, that they need, right from reception, right through to clinicians, and when we take enquiries on the phone. We try our best to meet the patients' needs. If we can't do it, we pass it over to a clinician. Patients are our, they're our bread and butter, that's what we're here for (PB.A1).*

The practice characterised itself as a 'forward-thinking practice', which had developed hugely since its initial establishment.

> *We give a really good service; the patients are happy; we get good results back from questionnaires; we're very forward thinking. I think as a surgery, we stand quite well in the community […] very well and amongst other GP practices as well. I think because we lead in so many ways. I think they probably strive to be like us (PB.N1).*

Historically, the practice had been known to apply 'innovative' approaches in facilitating good services. These included a patient appointment system with 5 minute intervals (1960s), remote communication for doctors-on-call by using radio communication (1970s) and a computerised patient register installed since 1986.

6.3.2 THE QUALITY AND OUTCOMES FRAMEWORK (QOF): THE PERCEPTIONS OF INFORMANTS AND PRACTICE ACHIEVEMENTS

6.3.2.1. PEOPLE'S PERCEPTIONS TOWARDS QOF

Healthcare professionals in Practice B responded positively toward QOF, which was seen as an integrated approach to manage health care delivery. Moreover, it was regarded as providing a guidelines and setting targets for a high quality standard of health care.

> *I think we are more QOF guided and we do follow QOF and we do maintain that, because it is important and it's a structure of care and a guideline, and we appreciate that, that we give good quality service (PB.N1).*

Informants believed that if the practice continued to follow QOF guidelines in delivering services, it would result in better health outcomes. Yet, they were aware that it would be too early to assess whether QOF really led to better health outcome (PB.N2; PB.D2).

> *You know in 20 years time, when we've controlled, when we've had 20 years of controlling everybody's blood pressure perfectly, monitoring the kidney function, controlling their diabetes and measuring the cholesterols, and people are living till they're 95, with quality of life, then we can say 'well we've done something right there' (PB.D2).*

QOF was seen to drive the practice to generate robust evidence for good health care. At this point, informants agreed that more efforts were needed to prepare such evidence. This included an engagement with statistical procedures, templates, and protocols. These were crucial in managing the required QOF data.

> *[...] it's really on a basis of trying to improve quality and have evidence based on improving the quality really. And have better statistics, our statistics in Britain are the best in the world because people keep the data well recorded. And it was an opportunity, from going from one contract to another contract to do it then [...] to change it from doing out of hours, change it from doing in hours. And it was an opportunity to, while the whole of the project, while the whole of the contract was being reviewed, to change at that stage. And they really wanted to do it to say 'we're giving you money, we need to have evidence of where that money is going and that it's actually improving patient care' (PB.D2).*

The practice's ability to provide robust evidence of their performance also proved that the practice was 'worth the money'. The informants understood that the quality of their services determined the amount of financial incentives from QOF.

> *QOF is good clinical care, we recognised that the measurement of performance, and proof of that performance, was going to be imperative to meet the higher standard of targets and also to prove that we were worth the money (PB.A3).*

Along with having positive perceptions, informants were also concerned about the potential dysfunctional consequences of QOF. While QOF encouraged the practice to keep good records of health care activities, it was seen to make clinicians focus more on obtaining data rather than dealing with patients' health concerns. Indeed, for some informants, data acquiring activities meant extra works for them.

> *[...] sometimes it's a bit extra work. Priorities I think remain the same, trying to provide good patient care. Sometimes it distracts you. [How?] Well, if you're thinking too much about have you measured this? Have you measured that? You're looking on the computer to see is it there. Whereas before, you would concentrate first on the patient and maybe less on the numbers. But as you get used to the numbers and you have a system to remind you, you don't have to think about it. It's there and at the*

end or the beginning or whenever it fits in, but it can be a distraction sometimes (PB.D4).

The engagement on the extra work was believed to have some impact on the consultation time allocated for patients. Both doctors and nurses admitted that they had less time to deal with patient care. One of the physicians expressed:

Because often the patient comes for one thing, but we're looking at the computer and thinking, 'ah this patient needs their blood pressure checking and their cholesterol', but the patient might have come in with a sore toe! You know, poor old patient doesn't get as much time for the toe, as we're trying to do other things (PB.D3).

This situation was perceived to negatively influence clinician-patient interaction. While informants believed that QOF was necessary to ensure good clinical procedures and improve patient health outcomes, they noticed that patients possibly felt ignored during consultations.

Not on the patient outcome. But on the patient's consultation, because they're sitting. I mean I turn my screen, and I try and involve them, and try and make them aware that what I'm doing is actually good for them, and good as part of their care, rather than just data collecting (PB.N2).

I think sometimes it can get in the way of why a patient comes to see you. If a patient comes to see you because they are depressed and you kind of talk about their smoking habits, and you take their height and weigh them, and you talk about whether they need a cholesterol check, it will interfere in that patient dynamic (PB.D1).

In addition, informants claimed to experience increased workloads, as well as work pressures, that stemmed from targets embedded in QOF (PB.N2). At the same time, informants were very keen to achieve the maximum possible QOF points for the practice. They recognised that the practice tried to ensure optimal achievement by setting up systems to obtain the required data and information. Some adjustments, such as setting up teams to manage collected data, extending consultation times and regular QOF meetings were made to make sure QOF targets were achieved (PB.D1).

These findings suggest that at one point, informants acknowledged that QOF encouraged evidence-based practices and helped the practice to improve the quality of care; on the other, it was perceived to increase the workload and pressure for individual healthcare professionals. Some concerns relating to interruption in patient-clinician relationships were also expressed.

Practice B was able to consistently achieve full QOF points for four years in row. However, there was a decrease in the 5th year.

Table 16. QOF Score of Practice B

Year	Achievement	Maximum Points Available	Percentage
2004/2005	1,050	1,050	100%
2005/2006	1,050	1,050	100%
2006/2007	1,000	1,000	100%
2007/2008	1,000	1,000	100%
2008/2009	982.65	1,000	98.27%

Source: The NHS Information Centre (2010)

Informants associated the decline in the 2008/2009 score with the introduction of the patient survey. The method used in the survey was seen to be ambiguous, as it only involved small numbers of patients, compared to the huge number of patients served by the practice. Consequently, the result might have been biased. On this matter, the practice administrator commented:

> *[...]we didn't achieve that last year, through no fault of our own, because the government brought in a new system, whereby instead of us meeting, giving the patients questionnaires and giving the feedback from that to QOF, it was decided that the Department of Health would employ their own, outside, like a MORI type poll, and they would send the patients direct questionnaires, to the patients and receive them back, and they would implement the feedback (PB.A1).*

Although it was a slight decrease, it affected the practice significantly as QOF contributed almost 30% of practice income (PB.A4). It became a critical concern as it could serve as a disincentive for the practice to put in more effort. Indeed, as

stated by the Practice Manager, the practice had already invested to provide supporting activities, facilities and time to ensure that QOF targets were achieved.

Thus, the practice realised that QOF was financially influential for the running of the practice. To support that, the practice was willing to put in more investment and make adjustments to their system. The next section describes findings regarding organisational changes experienced by the practice since 2004.

6.3.3 PERCEIVED CHANGES IN THE ORGANISATION: WORKLOAD INCREASE AND A SHIFT TOWARDS A PROACTIVE HEALTH CARE SYSTEM

All informants agreed that they were currently experiencing an increase in workload; yet, they had divergent opinions on the causes. One of the causes narrated was changes in patients' expectations. This was perceived to increase pressure on staff as they were expected to satisfy the expectations.

> *[...] patient expectations now are so huge that sometimes you can get a bit de-motivated because there's nothing you can do, you know, you can't, you cannot please all people, and I think that's probably the hardest thing in reception to deal with, the fact that you know, you take a lot flak from people because they can't get the doctor they want, they can't get the time they want and there's nothing you can do about it [...] if we cut down the number of patients we've got by half, we could provide a fantastic service, but, and if patients' expectations are so much, even in the 11 years I've been here, it's changed a hell of a lot, they expect it, whereas they didn't years ago (PB.A2).*

Another cause narrated was that the practice offers additional health care services. The practice's decision to offer additional health care services was intended to attract more patients, as stated by one of administrative staff; such services included vasectomies and minor surgeries, such as carpel tunnel and cysts (PB.A1). Consequently, this meant more work for healthcare professionals, which led to an increase in workload.

Furthermore, most informants confirmed that QOF had contributed significantly to a workload increase. This related especially to recording patient data in the system. With the additional responsibility, informants claimed that the time

allocated for consultation was not sufficient, as they needed to accommodate the data collection process. Clinicians said that this had made them not only concentrate on patient health issues, but also on administrative issues. Based on this, the practice adjusted its consultation time (PB.A2). The practice also adjusted its working hours and days to accommodate the changes in consultation time and the expectation of patients. To fit in with the changing nature of society and life style, the practice extended its opening hours to include Wednesday evenings and Saturday mornings. This was crucial to improve patients' access to the practice (PB.A1).

Despite an increasing workload, QOF was believed to shift how health care provision was delivered. It made the practice move from a reactive health care system into a proactive system. More importantly, QOF was also perceived to help the practice raise its organisational performance, as well as clinical service quality.

> *I also think that they wanted to strongly link general practitioner's income to an increase in general standards of not only care, but also organisational standards. And if you look at the early standard of QOF, a lot of them were organisational and simple things like having contracts with staff and having good protocols and a good human resources system as well as clinical care (PB.A4).*

To ensure that the practice was able to fulfil the standards, various preparations were made, including a process of checking and rechecking QOF activities. Hence, QOF was believed to bring individual healthcare professionals a higher degree of accountability. Staff felt that it was part of their responsibility to ensure that other people also completed their tasks. Thus, regardless of their position in the practice, people took their QOF responsibility quite seriously and were proved to be very much accountable for their jobs.

> *[...] everybody in the practice was kind of allocated a QOF, an area of QOF, a responsibility, and that person was then made accountable for the performance of that area of QOF (PB.D1).*

In sum, practice B accommodated QOF through several adjustments to its system, including extending opening hours and allocating administrative responsibilities.

This contributed to a notable increase in workload. Some new roles checking and rechecking activities emerged as a result of QOF, which reflected how individual healthcare professionals shared accountability to achieve the targets. Overall, QOF was seen to support a proactive healthcare system.

6.4. PRACTICE C: BETTER FACILITIES TO BECOME A TRAINING PRACTICE

6.4.1. GENERAL DESCRIPTION

Located in a historic spa town, Practice C aimed to ensure effective and high quality health care services provision, which was supported by a friendly and caring environment. At the time of the interviews, this practice had just moved into a new medical centre equipped with modern facilities. This development was expected to suit the practice's strategic needs.

The practice was formed in 2006, through the amalgamation of two well-established practices. One of the reasons for the merger was to have a more efficient management through reducing the individual practice's overhead costs. The merger also enabled the practice to provide a wide range of health care services for patients, through its pool of experience.

> *[...] when you're running a small business your overheads can be high, so we employed a manager between us, splitting the cost. Then almost by osmosis, staff started cross-covering, and clinically it made sense for the doctors to cover each other. We have interests in different areas and we all get on together, so it was a pooling of experience, workforce and power (PC.D2).*

> *[...] by coming together we could provide a greater range of services for our patients (PC.D5).*

This practice catered for a total of 10,253 patients, most of whom were middle-class people. The largest number of patients was in the age range 35 − 74 years, with around 51% of total patients. Deprivation was reported to be minimal in that particular area and far less than the average of the area covered by the PCT.

Figure 11 (below) presents the age characteristics of patients registered in Practice C.

Figure 11. Age Characteristics of Patients (Practice C)
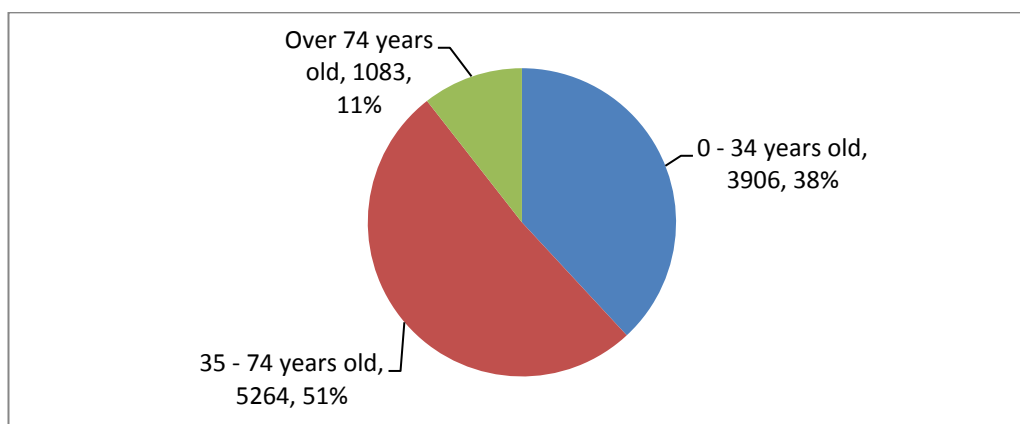
The practice's priority was the patients, which served as an underlying reason to become a better practice in the future. To support its efforts in providing essential, additional and enhanced health care services for its patients, this practice had a large pool of health care professionals. There were 8 GPs, 5 practice nurses, 3 health care assistants, 6 administration team members and 12 receptionists. Ten members of staff agreed to take part in the research.

Table 17. The Characteristics of Informants in Practice C

No	Informants	Gender	Professions	Status in Practice	Experiences in Health Care	Years in Current Practice
1	PC.A1	Female	Admin	Practice Manager	15 years	6.5 years
2	PC.D1	Male	Physician	Partner GP	14 years	10 years
3	PC.D2	Female	Physician	Partner GP	11 years	6 years
4	PC.D3	Female	Physician	Partner GP	19 years	10 years
5	PC.D4	Male	Physician	Partner GP	31 years	14 years
6	PC.D5	Female	Physician	Senior Partner	20 years	20 years
7	PC.N1	Female	Nurse	Practice Nurse	20 years	6 years
8	PC.N2	Female	Nurse	Practice Nurse	40 years	20 years
9	PC.A2	Female	Admin	Practice Admin	8 years	8 years
10	PC.D6	Female	Physician	Partner GP	22 years	8 years

The practice aimed to expand its competences by becoming a training practice. This enabled the practice to become involved with research, as well as education and training programmes for both undergraduate and postgraduate students. Moving toward a training practice was expected to bring some benefits for the

practice in terms of inducing an ongoing thinking and updating of its knowledge and capacity.

> *Our vision for the future is to be [...] become a training practice. Being involved in training, both of undergraduates and postgraduates. And also nurses, nurse training and we're also going to, but we're already dingo a fair amount of research projects, but we're going to try and expand our research work as well (PC.D3).*

6.4.2. THE QUALITY AND OUTCOMES FRAMEWORK (QOF): THE PERCEPTIONS OF INFORMANTS AND PRACTICE ACHIEVEMENTS

6.4.2.1. PEOPLE'S PERCEPTIONS TOWARDS QOF

In general, informants acknowledged QOF as a guideline that directed and led the practice in delivering services. Through its indicators, QOF aimed to ensure that the practice maintained quality of care for its patients (PC.D1; PC.A1).

> *It gives a common focus and goal and we all want to maintain the quality of care to the patients so it has a bearing on that (PC.D1).*

QOF ensured quality of care through emphasising evidence-based practice. The practice was required to prove that it had delivered good services by providing evidence. While informants were aware of the robust assessment of the practice's performance based on QOF indicators, they noted that some indicators were not relevant to clinical evidence, especially when associated with health outcomes. The indicators were perceived not to represent clinically proven targets.

> *I want to get to the clinically proven targets that do help patients and prevent all the longer term complications and diseases. The problem comes from not all the targets in the current QOF being clinically proven and how much are they of benefit. Whereas QOF was originally set out on a clinical thing with an evidence base behind it, to show the targets were going to improve patient care, mortality and morbidity, therefore, they're a good thing. Now, you have silly things like doing a depression scale on a depressed person when they are first diagnosed and then 5-12 weeks afterwards. How much does that improve clinical care? I don't know! Also asking everyone*

*under 25 if they smoke, every year! Is that of huge benefit?
(PC.D1).*

The nature of the QOF assessment that was conducting it annually was perceived to be a repetitive task. Moreover, some of QOF related activities were seen to be less clinical care related and more about doing the work. Informants asserted that ticking boxes and repeating of work contributed to an increase in workload.

> *It's difficult actually to get it all done and I think one of the problems is sometimes not all the points seem as important as other points. So, a lot of work seems a bit repetitive or not as relevant and therefore you don't[...]you feel as if you're ticking boxes rather than actually improving patient care you know. On other issues you think: yeah, I should have done that and it's good to review things, but other times, you sometimes feel that you're doing work for the sake of doing that work. So that increases your workload (PC.D6).*

One of partner informants added that while standardisation of care through QOF was important, it potentially led to unnecessary treatments or 'over treating' patients (PC.D4). Patients came with different health problems that particular procedures might not be necessary or relevant to their particular case.

> *Not particularly, as I say individually, there may be attempt to over treat some people. There may be inappropriate things such as investigating people in their 90s and very late in life and treating them for things that aren't appropriate. But mostly you know that that's not appropriate for the individual patient because it makes such little difference individually, their ticking the box, then I think we're unlikely to do that just for financial reasons. Mostly the QOF is quite sensible. Most of it's based on relatively sound medical principles although, outcomes I've no idea about (PC.D4).*

From an organisational perspective, with standardised procedures and protocols, QOF was perceived to add a sense of bureaucracy to clinical activities.

> *It's still very much about seeing patients when they want to see us. We do send for people who are on regular medication. We do send for them regularly. What QOF has done has introduced a layer of bureaucracy if you like (PC.D4).*

Informants asserted that at its initial implementation, people were enthusiastic towards QOF and how it was expected to help improve performance. However,

such enthusiasm shifted into disappointment, associated with the constant changes to QOF indicators. In fact, partner informants acknowledged that it became unlikely to achieve maximum QOF points with indicators continuously changed.

> *Unfortunately, what seems to have happened is they keep moving the goalposts. You start doing one thing with enthusiasm and concentrating on what you're doing but then they move the goalposts by removing indicators from the QOF and putting in new ones. So, it's debatable how useful some of them are (PC.D1).*

These findings imply that embedded procedures, required to capture and present patients' information, were thought to be less motivating as they resulted in more bureaucratised ways of working and redundancy of care. At the same time, informants understood that QOF assisted the practice in better delivering the services. Indeed, the ability of the practice to provide such evidence was critical, as it brought financial consequences for the practice. Compared to other financial schemes, one partner mentioned that QOF seemed to be the most consistent one. In this sense, as QOF was very much supported by a computer-based information system, potential fraud by external parties was considered to be negligible.

> *It's the most consistent. It's the one that, although it can be managed and manipulated by the Department of Health. There's little the local PCT can do to interfere with it. The computer decides. The computer gives you a score and provided there's no fraud or anything going on, that score is what we all get. Whereas the other income streams can change on a yearly basis or six-monthly basis. If the PCT decide not to support a locally enhanced service then they can pull it, whenever they wish. So it's a consistent income (PC.D4).*

Overall, despite some concerns about QOF's less favourable consequences on how people conducted their activities, it was thought to be a robust system, in a way that the practice could prove its ability to provide good services.

6.4.2.2.   ACHIEVEMENTS ON QOF

For the first two years of QOF, the practices had not been amalgamated, and there were still two independent practices working on QOF. Both practices obtained very high points in those two years. The 2006 amalgamation did not weaken the

practice's ability to maintain its QOF achievement. In total, during 5 years of QOF implementation, the practice had achieved an average of more than 99% of the points.

Table 18. QOF Score of Practice C

Year	Achievement	Maximum Points Available	Percentage
2004/2005*	Practice X: 1,042.05	1,050	99.2%
	Practice Y: 1,036.27	1,050	98.7%
2005/2006*	Practice X: 1,049	1,050	99.9%
	Practice Y: 1,048.88	1,050	99.9%
2006/2007	997.89	1,000	99.8%
2007/2008	998.55	1,000	99.9%
2008/2009	994.91	1,000	99.5%

Note : * data before two practices amalgamated
Source: The NHS Information Centre (2010)

The practice manager asserted that the slight decrease in 2008/09 was caused by the adaptation process to new IT system.

> *This year we're a bit behind in QOF than we have been in previous years and that's down to us changing our GP system, IT system, from Amis to System 1. That's had a lot to do with staff training, how the data is entered. Has everybody got to grips with the templates? Are we entering the data the way we should be? We only went live with that new system last July. We had a long period of training for staff coming up to that. [...] I think it's been the joint thing of the change in the IT system and the move to the new surgery. [...] It's been really hard work, because we've brought the two teams together under one roof for the first time. We've had a lot of reorganisation to do. We've always had the same method of achieving the QOF and that was the recall system, the recording of the data accurately, that's what we've done to achieve QOF points (PC.A1).*

6.4.3. PERCEIVED CHANGES IN THE ORGANISATION: ADDITIONAL STAFF AND NEW INFORMATION TECHNOLOGY SYSTEM

Along with an internal organisational arrangement including an amalgamation of practices and moving to a new practice site, informants confirmed that QOF contributed to several changes in their practice organisation. One notable impact was that QOF brought a new stream of income for conducting clinical care.

QOF was part of a change and there were other major changes that went along with it. So, the QOF element is only a bit of it, some of the other changes are more, have got more important ramifications than the QOF itself. The QOF has changed the amount of, if you like, performance related pay, so that we now get roughly half our income from things we do. Whereas, before that, it was apparently about 2/3 of that we got from just turning up for work. Whereas now that's not enough, we've got to hit the targets [...]. So, there is an element of looking at income streams which we never did before, or at least we did less of (PC.D4).

While it brought a significant income flow, it was perceived to be harder to achieve than previous schemes. Informants asserted that such differences affected how people worked in the practice. They were aware that the previous ways of doing things were not enough if they wanted to achieve a high QOF score (PC.D4). As the practice realised the difficulties, engagement on QOF also encouraged the practice to seek for alternative sources of income.

Having more funding available meant that the practice would be able to invest more in quality services. The practice realised that to be able to receive more funding, they needed to work harder than before; yet, informants understood that this was a consequence if they wanted to improve their organisational performance through QOF. At the same time, they were concerned that their intensified efforts did not seem to correlate positively with the amount of QOF income. Indeed, the income increased, but it was not significant to counterbalance the practice's expenses (PC.D1).

You seem to be running faster and faster, to keep the same income going. Of course there's been no increase in income overall, in fact there's probably been a drop since 2004. Plus expenses are going up, so you're having that battle between generating income and expenses and running the business (PC.D1).

In order to cope with the increasing workload, the practice engaged in variety of changes. One of them was by recruiting additional staff to execute the work, including clinical care and administrative staff (PC.D4). It was asserted also that non-clinical work was as important as clinical, especially those related to record

keeping and form filling. The importance increased due to the QOF requirement that chronic disease patients were to have regular health checks.

> *So, from that point of view it's increased our workload. It hopefully will have increased the actual care of the patient, because, if QOF is properly constructed it ought to be about good clinical care, so it should be about incentivising the GPs and the practice as a unit to look after patients with particular conditions better, which will mean monitoring their progress better. So, it's certainly increased our workload. It's probably increased the patient throughput (PC.D4).*

For clinical tasks, the major change was related to the delegation of some of the chronic disease care from GPs to nurses. This was intended to spread the doctors' clinical workload. Similarly, some basic routine clinical work was also delegated from the nurses to healthcare assistants.

> *So, routine taking of blood samples for instance, which the nurses used to do a lot of, now it's devolved to the health care assistants level, which has freed up nursing time to do some of the routing call and re-call of patients (PC.D4).*

The practice also developed a better information system to help with patients' data management. This was necessary to facilitate evidence for QOF assessment.

> *Certainly we've got a lot more computerised, so it was a matter of integrating that with the packages that were available to keep an eye on that; putting alerts up when things needed to be done, and then probably doing a general chase-up come January, of things that hadn't been done through the year (PC.D6).*

In general, the practice noticed that it needed more staff to cope with QOF work. In addition, more empowerment through delegation of clinical work was needed, to enable target fulfilment. Such adjustments were important for the practice, as a high QOF score brought greater financial consequences for the practice.

6.5. PRACTICE D: COMMUNITY-BASED PRACTICE AND ELDERLY POPULATION

6.5.1. GENERAL DESCRIPTION

Amongst the four practices under study, Practice D was the only one located in a small town with no other practices within its 3 miles radius, it was established in 1930s. This practice identified itself as a semi-rural practice and most people working in the practice were from the surrounding area. This made them attached to the practice and the patients they served. While the largest category of patients was those in the age range 35-74 years of age, most informants were concerned about the fact that they were dealing with an aging population. The number of patients over 74 years was 1,145 people out of 12,254 total patients (9%).

Figure 12. Age Characteristics of Patients (Practice D)
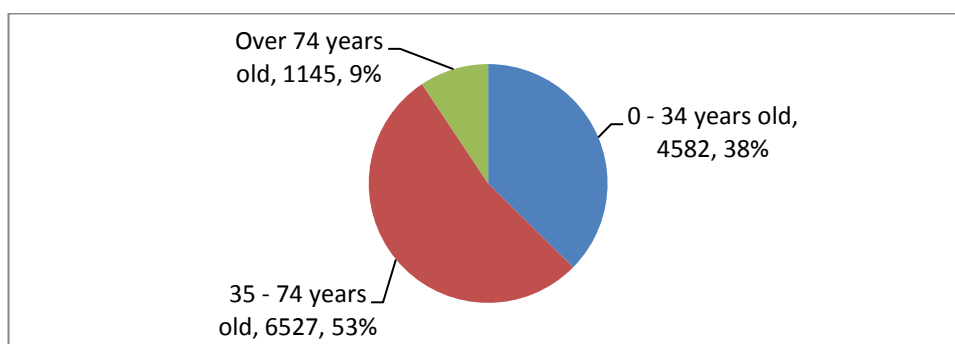
With such a large covering area, the practice had 10 physicians, 4 nurses, 2 health care assistants or support workers, 1 phlebotomy and 17 people working as management and administrative staff. Along with those employed by the practice, there were also clinical staff assigned by the PCT to work in the practice. These included 6 district nurses, 2 health visitors, 1 administration assistant, 2 community midwives, 1 community psychiatric nurse, and a counsellor. Ten informants from different professions took part in the research.

Table 19. The Characteristics of Informants in Practice D

No	Informants	Gender	Professions	Status in Practice	Experiences in Health Care	Years in Current Practice
1	PD.D1	Female	Physician	Partner GP	8 years	8 years
2	PD.N1	Female	Nurse	Practice Nurse	18 years	8 years
3	PD.D2	Female	Physician	Partner GP	10 years	9 years
4	PD.A1	Female	Admin	Office Manager	12.5 years	12.5 years
5	PD.A2	Female	Admin	Practice Mgtm Assistant	11 years	11 years
6	PD.N2	Female	Nurse	Practice Nurse	35 years	20 years
7	PD.HCA1	Female	HCA	Health Care Assistant	4 years	4 years
8	PD.N3	Female	Nurse	Practice Nurse	30 years	19 years
9	PD.A3	Female	Admin	Practice Manager	11 years	5 years
10	PD.N4	Female	Nurse	Practice Nurse	25 years	13 ears

6.5.2. THE QUALITY AND OUTCOMES FRAMEWORK (QOF): THE PERCEPTIONS OF INFORMANTS AND PRACTICE ACHIEVEMENTS

6.5.2.1. PEOPLE'S PERCEPTIONS TOWARDS QOF

Informants were aware that QOF was important to help them providing a better health care service. It was done through standardising health care services across the nation, and it provided performance-based financial incentives for the practice. They understood that it was an improvement on how performance of practices was assessed. Being able to fulfil QOF targets enabled the practice to get more funds for providing better services to the patients.

> *As I understand it, the reasons were to provide GPs with an incentive to improve the quality of care for patients, but also to try and standardise what that quality was, so that people were sort of acting within the guidelines of the NSFs (National Service Framework) and things and everyone was sort of trying to reach the playing field really, and, take it more, I suppose put the incentive in to developing good, high quality care instead of just looking at the numbers of patients coming through the door (PD.A3).*

Furthermore, QOF was also perceived as a way for improving clinical practices as it was evidence-based (PD.D1). It drove healthcare professionals to focus more on patient care, especially related to chronic diseases. Also, it led to better patient management (PD.HCA1). Fulfilling QOF targets required health care professionals to check the state of patients' health regularly.

> *[...] I think there are good things and bad things with QOF. In some ways it makes you really focus on some of the key things that need to be done for patient care, like blood pressures every six months, for example, you know whatever the indicator is, and I think that's good because it actually gives you a system, a reporting system, it gives you something to monitor from a management point of view, it gives you something to look at - what's happening at the practice, are we doing the right things at the right time? From a negative point of view, I think that can drive you down the route where you might not have actually felt it was clinically appropriate, where you needed to spend time doing those things, or it may have been more valuable to patients or the team to do something else. Because there's money involved, it focuses your mind, shall we say, and therefore staff time goes on doing that (PD.A3).*

However, some informants also put forward the potential dysfunctional consequences of QOF. One partner emphasised that QOF potentially shifted clinicians' focus onto certain aspects of clinical care; hence, sacrificed other aspects of care (PD.D1). In turn, this was seen to undermine the wholeness of care.

> *But it depends what's in the QOF which is my concern because other areas that are highly relevant but you're not actually gonna get paid for hitting targets for, it almost puts them as a lesser value in some respects from how the Government perceive the health and the monetary payments associated with it (PD.D1).*

These concerns were expressed not only in relation to how QOF would affect the way healthcare professionals worked, but also to patients. QOF provided targets to measure performance; yet, an excessive emphasis on achieving targets possibly might lead to detrimental effects for patients. Patients should become the key point of health care services.

I think sometimes they get frustrated by it, because they know that basically we're calling them in for this, this and this, and they'll say well I'm absolutely fine and they don't think they need to come and I mean it's good because it helps monitor things and it helps us manage disease but I think sometimes the patients know that we've got targets and that's what drives us; that makes them feel like they're not individuals, they're just a disease a number you know. So, I think from that point of view, it's not good for the patients (PD.N1).

In general, informants understood that QOF was needed as a way to better manage health care delivery; but they were aware of its potential downsides. While it supported evidence-based clinical practice, over reliance on such a system might sacrifice other aspects that were not covered by QOF. The practice also realised the significance of QOF in providing new income from the PCT and how it encouraged the practice to work better.

6.5.2.2. ACHIEVEMENTS ON QOF

The practice had been able to achieve 100% of QOF points until the 2008/2009 assessment, when it only reached 97.7%. The decrease of over 2% significantly affected the amount of money received by the practice, because QOF contributed almost 25% of practice income.

Table 20. QOF Score of Practice D

Year	Achievement	Maximum Points Available	Percentage
2004/2005	1,050	1,050	100%
2005/2006	1,050	1,050	100%
2006/2007	1,000	1,000	100%
2007/2008	1,000	1,000	100%
2008/2009	977.32	1,000	97.7%

Source: The NHS Information Centre (2010)

However, the practice claimed that such a decrease was acceptable. The practice manager stated that they had put in their maximum effort and it was what they expected to get.

I think we assume we will get 95-98% of QOF monies, we're high performing, we had 100% for many years, then last and this year will probably be just below that. So, although it's not

something we take for granted because we have to spend a lot of time on it, I don't think we ever think what will, what won't. I think it'd have to be a big drop before it started affecting the practice in the sense of we'd have to lose staff or something like that. I think that's the overall financial climate and we don't separate the QOF money, from other income streams in that sense. I think what the QOF has done is, bolstered the GPs, the partners' profits, which have fallen because of the tightening of the contract and everything (PD.A3).

6.5.3. PERCEIVED CHANGES IN THE ORGANISATION: DELEGATION OF CLINICAL CARE RESPONSIBILITIES AND RECRUITMENT OF LOWER LEVEL HEALTH CARE PROFESSIONALS

Informants were aware that apart from changes due to QOF, the practice itself had undergone major changes as results of both internal events and external environment change. The practice stated that there was significant change in its surrounding area with new housing developments. This led to an increase in the number of patients. Internally, the practice also experienced changes in the composition of its personnel. With senior physicians retiring, the practice became 'younger' as it welcomed new young partners (PD.N2).

There have been a lot of changes. The practice has grown quite a bit, especially with a lot of new housing being built and, more patients, more people coming into the area. We have more GPs than we had and it's become a younger practice I think, because a lot of the older GPs have moved on, retired and moved on, and they've got younger doctors coming in, so it's become a younger practice (PD.N2).

Practice D also made several adjustments and preparations to accommodate the clinical care aspects required by QOF. These included developing teams responsible for particular clinical areas and setting up chronic disease clinics. The new clinics were run mainly by nurse practitioners. This was especially crucial as the practice faced an ageing population. More available clinics also meant more access for patients and eventually more patients (PD.D1).

Whereas we set up clinics which the practice nurses ran, because you're picking up more, identifying more, chronic disease is actually increasing in numbers as well. We've got a

*particularly elderly population, so probably are quite skewed in
that respect. So, that was probably one of the first things that we
did, was focus on the chronic disease clinics, to make sure
people were getting the proper recalls, getting invited in and
things were running smoothly (PD.D1).*

The Practice Manager asserted that the establishment of QOF teams required the
practice to consider the skill-mix. The practice needed to ensure that there were
different people with a variety of skills working in the teams. The establishment of
a team was intended to put everyone on an equal footing and to strengthen the idea
that it was the practice which controlled quality achievement, not the GPs.

*I suppose, the difference between the old and the new GMS
contacts, where the old one was very focused on the numbers of
doctors, and numbers of patients, numbers of jobs, a very
itemised basis, more of a factory line. The idea with the new
contract as I understand it, was to go to a more quality driven
approach to allow the contract to be more driven by the
practice, rather than the GPs, so you started to be able to get
into the whole change arena of skill mix, bringing in different
people to work in the team, and that, the new contract enabled
you to do that, it wasn't just about GPs seeing patients[...], it
was supposed to give more flexibility and respond to local
priorities more (PD.A3).*

Both clinical and administrative informants reported that with the setting up of
chronic disease clinics, they experienced an increase in workload (PD.D1; PD.N4).
The practice tried to find ways of coping with this issue including recruiting
additional health care staff and delegation of clinical care responsibilities to lower
level health care professionals. To address the recruitment issue, the practice
decided to hire lower level health care professionals and train them up to the point
where they were qualified to perform certain clinical care activities. For clinical
work delegation, the work flowed from physicians to nurses and from nurses to
healthcare assistants and phlebotomists. By delegating some clinical routines, it was
expected that clinicians were able to concentrate on providing chronic disease
treatments.

*We wanted to make sure that the G-grade nurses were doing as
they should be. We'd never had health care support workers or
phlebotomists in this practice before. It had always been done
by our G-grade nurses. Then when we started pushing a lot of*

the chronic disease work that the GPs had previously been doing across to the nurses, we needed to free up their time from the more menial tasks by getting appropriate bands in place and passing it down through the structure to the phlebotomists and health care support workers (PD.D1).

Informants also recognised the importance of templates and protocols that served as guidelines in collecting patient information. These templates and protocols made data collection quicker and more complete. However, informants claimed that such data collection activity was not novel for the practice, as the practice had already had a system in place prior to QOF. The practice just needed to re-adjust the existing system to be aligned to QOF and ensure that data was produced as QOF required.

Really all what we've done is adapt our existing templates to include anything new that the QOF was asking for. But we already had our call system in place. Because when I first started, I trained upon the diabetes care, and set up a recall, we had a call system, but I adapted it for my use, to ensure that all the diabetes patients are recalled regularly, twice a year, unless they were not controlled very well, and then they would come in more often. But for other patients like the COPD and the asthma and things like that, we've already had a recall system in place. So, in that respect, we've already had them, but like I said, the QOF just gave us more. They were requesting more information. So we just included that new information that was needed to our existing templates (PD.A2).

Overall, the findings show that the practice made some changes in its system to accommodate QOF. Although its narrative strongly emphasised that the practice had already had such systems, QOF directed the effort of the practice in dealing with healthcare services.

6.6. CONCLUSION

It was interesting to find that all practices experienced a decrease in their points achievement. Figure 13 below shows the trends of the four practices. Out of the four practices, Practice D experienced the greatest fall in points, a drop of more than 2%. Practices A, B, and D conveyed that the change of indicators during the last year of assessment made it difficult for practices to fulfil the target. Furthermore, all of them mentioned that it was not because of a lower level of performance. The method employed by the government to assess the patient satisfaction was considered to be inadequate or unfair, as it did not represent a real sample of the practices. For Practice C, the cause of the fall was thought to be their internal adaptation, with a new information system and their movement to a new site.

Figure 13. The Trend Line of QOF Points Achievements 2004-2008/09
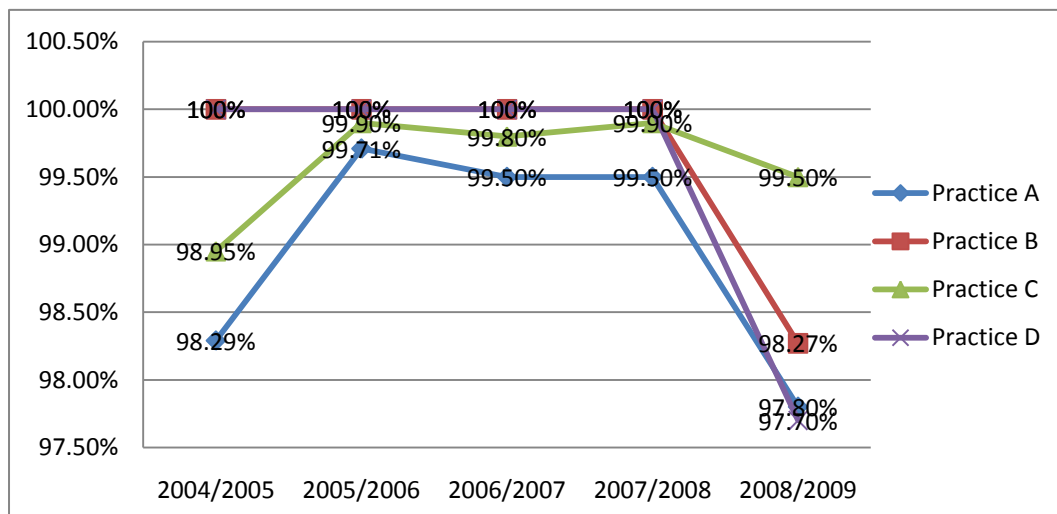
The findings of this chapter show that QOF contributed to some organisational changes in the practices. These changes were vital in supporting the practices' efforts to implement QOF. Moreover, QOF was perceived to bring a positive influence to patient management. Yet, some informants also concerned about its potential dysfunctional consequences.

The findings lead to the need to scrutinise how practices conducted changes in detail. The next chapters discuss the phenomenon of change by focusing on perceived changes in organisational strategy, structure and identity and norms.

Table 21. Summary of Findings on QOF and its Perceived Impacts on Practices

No	Main Ideas	Findings	The practice (s)
1.	Informants' Characteristics	All practices represented by various healthcare professionals, including partners and salaried GPs, practice managers, practice nurses, HCAs and administration staff. Salaried GPs were employed only in Practice A.	Table 13 (A)
			Table 15 (B)
			Table 17 (C)
			Table 19 (D)
2	QOF Points	All practices obtained very high QOF points (more than 90% of maximum QOF points on average)	Table 14 (A)
			Table 16 (B)
			Table 18 (C)
			Table 20 (D)
3.	QOF Indicators	Changing of indicators became political interference and provided as deterrent for achieving a high QOF score	PA.D1
			PC.D1
		Perception toward indicators that were perceived to be irrelevant to clinical outcomes	PA.D1
			PC.D1
			PC.D6
		Some clinical indicators were difficult to achieve	PA.N1
4.	Vision and Mission	Personalised general practice and continuity of care	PA.D1
		Patient-centred care with range of services	PB.N1
			PB.A1
		Expanding capability of practices	PC.D3
		To provide a high standard of care to the local community	PD.D2
5.	Perceptions toward QOF	Perceived reason behind QOF development	PA.D1
		QOF as a general guideline for standardising healthcare	PA.D2
			PB.N1
		QOF to improve patient outcomes and quality of health	PB.D2
			PC. A1
			PD.A3
			PD.A3
		QOF as evidence and basis of incentives	PB.D2
			PB.A3
			PD.A3
			PD.D1
			PD.HCA1
		QOF contribution to practice income	PA.D1
			PA.D4
			PB.A4
			PC.D4
			PC.D1
		Consistent and secure performance assessment system	PC.D4

No	Main Ideas	Findings	The practice (s)
6.	Perceived Impact of QOF	Establishment of recall system	PA.D1
			PD.A2
		Assisting healthcare professional to focus more on chronic diseases.	PA. D2
		Assisting practices to measure and record activities	PA. D2
			PA. N1
		Activities become standardised	PA.N1
		Shifted to a proactive healthcare system	PA.D4
			PB.A4
		Greater accountability	PB.D1
7.	What Practice Do to adjust	Adjustment on consultation time	PB. D1
		Holding regular QOF meeting	PB.D1
		Setting up audit team to check and recheck	PB.D1
		Extending opening hours	PB.A1
		Hiring more staff	PC.D4
			PD.D1
		Training staff and healthcare professionals	PC.D4
			PC.N4
		Developing information system	PC.D6
		Establishing chronic disease clinics	PD.D1
		Adapting the old system to the new one	PD.A2
8.	Unintended Consequences	Inconvenience for patients	PA.D2
			PA.D4
			PD.N1
		Distraction to patient-healthcare professional dynamics	PB.D3
			PB.N2
			PB.D1
		Focus on numbers or recording activities	PB.D4
			PB.A2
		Focus on certain aspects of care	PD.D1
		Over-treating people	PC.D4
		Increasing pressures in the workplace / increased workload	PB.N2
			PC.D4
			PD.D1
			PD.N4
		Introducing a layer of bureaucracy	PC.D4
9.	Perceived causes for increasing workload	Changes in patients expectations	PB.A2
		Additional healthcare services	PB.A1
10.	Others	Reason for merger in practice C	PC.D5
		Internal changes of personnel in the practice	PD.N2

CHAPTER 7

ORGANISATIONAL STRATEGY

7.1. INTRODUCTION

The previous chapter highlights the informants' perspectives on organisational and individual changes in the practices under study. Generally, most informants perceived that QOF brought positive changes on both organisational and individual levels. However, they were also aware of some dysfunctional consequences caused by QOF.

This chapter presents the findings on organisational memory and change, with particular emphasis on the impact of the QOF scheme on GP practices' organisational strategy. The findings are presented based on themes that emerged during the data collection and analysis, quotations from the interviews are presented to illustrate particular points and support the findings.

7.2. VISION, MISSION AND GOALS OF THE PRACTICES

Chapter 6 showed that each practice had its own characteristics; Practice D identified itself as a community-based practice, while the main characteristic of Practice B was being a forward thinking practice, the vision for Practice A was to provide personalised healthcare services and Practice C saw itself as a modern practice. Regardless of those differences, all four practices were committed to the notion of patient-centred care, which translated into visions, missions and plans.

Practice A believed that personalised health care reflected better services, which was achieved through ensuring a continuity of relationship between patients and practice. The practice's mission involved delivering healthcare services to fit the population's demands and to engage in an educational role. To fulfil these aims,

the practice faced difficult choices over whether to maintain a personalised service by remaining at its current size or expanding to cover a wider range of patients.

Practice B identified itself as a forward thinking practice. This was represented not only through its clinical services but also in its practice management. To maintain its income, the partners decided to expand the practice, establishing a new branch and becoming a medical business practice. As stated by the practice manager:

> *Our ambition is that we will be a medical business with the general practice at its core. So, we see that we will grow to become something that is more than just general practice, but stays within the medical arena. And the reason we decided on that is that we recognise that with the stresses on income for general practice would be quite strong. They have been strong for quite sometime and they will remain to be, so, for some significant time, [...] if you look at the history of the GMS contract since it was brought in 2004, there's been no major incremental increase in the money since 2004. Compared against inflation and the biggest cost was staff cost than actually it's added up to, or it could have added up to a loss of income over those years. So, the reason we decided to diversify our business to become a medical business, is that we recognise that through diversification we can maintain our own incomes, but also reward our staff, give them career diversification, career development, and meet those challenges of the cost-income challenges from the basic GMS contract (PB.A4).*

The diversification in providing health service was believed to help the practice to cover a wide geographical area and bring in more patients. Such business decision also opened up opportunities for staff career development and balanced the cost of operations. The practice was proud of itself for maintaining high quality services on both sites, by ensuring that patients received a comprehensive quality caring service through a patient-practice partnership.

Meanwhile, Practice C served as an example of a practice that had undergone major organisational restructuring. Originally established through a merger of two well-established practices, it intended to become a training practice and to provide personalised health care services.

To give a personalised service if at all possible but knowing that, because a lot of us work part-time you can't always see the GP you want to, depending on the urgency of the medical problem, but that we're all working as a team for that patient and we can refer on to different members to their expertise if we felt like we weren't the best person for them to see on that (PC.D6).

The practice recently moved to a new site equipped with modern and accessibility facilities. With the merger and a new site, the practice expected to offer a wider range of expertise, operate more efficiently and provide better health care facilities for patients.

For practice D, its location in a rural area and staff attachment to the area reflected its identity as a community-based practice. The identity of 'community-based practice' was articulated by providing a high standard of care that was relevant to the local population's needs:

To provide a high standard of patients care [...] to continue to provide a high standard of patients care [...] that's accessible to our local population and relevant to their health care needs (PD.D2).

Although the practice had a large coverage area, it tried to allocate patients for appointments within 48 hours. As part of its long term plan, this practice had prepared itself for expansion by acquiring a new land.

It is worthy to note that all four practices engaged in the Investors in People (IiP) framework [19]. IiP is an outcome-focused framework that helps organisations improving their performance. It provides *'tailored assessments designed to support organisations in planning, implementing and evaluating effective strategies and is relevant for organisations of all sizes and sectors'* (Investors_in_People, 2010). IiP delineates what organisations need to achieve, without dictating rigid ways to achieve it, and is versatile and flexible, to accommodate an organisation's specific

---

[19] IiP was initiated in 1991 as a non departmental government body and until March 2010, it was managed by the Department for Business, Innovation, and Skills (BIS). Since April 2010, IiP has been managed by the UK Commission for Employment and Skills (Investors_in_People, 2010).

needs. IiP assisted the practices in forward thinking and focusing on the achievement of their organisational targets (PA.A2; PB.D1; PC.A1; PD.D2).

> *We're investors in people, which obliges us to have a certain kind of quality in the way we look at things. We try and reward our staff and look after them, we try and make sure that through investors in people, if they want to kind of progress, if they want to go on and do other things, then we will pay for training courses for them to go off and 'professionally develop(PB.D1).*

> *Our performance level has increased; I think it has increased because of tools like Investors in People, even QOF, because we have looked at how we're working and moved forward. Looked at training and development of staff, looked at the future of the practice (PC.A1).*

> *We've had a mission statement for a long time, which is making sure that our services are the best that they could be for the patients of the practice, within our funding allowances, and that's a quality assurance system we've put in place. Making sure what we're doing is the best it can be. One of the tools we've used, alongside the new contract and QOF was Investors in People because what we found was, with the new system, putting business plans in place for the future and having our targets prioritised (PD.D2).*

IiP helps organisations to achieve their needs by focusing on their priorities. Figure 14 provides a framework with managing change, the inner ring of the IiP standards comprises effective management, culture and communication, developing people, managing performance and strategic planning. The outer ring represents areas to be chosen when organisations attempt to achieve more than those standards (Investors_in_People, 2010). All four practices under study had already attained Investors in People recognition.

Figure 14. The Framework of Investors in People

Source: Investor in People (2010)

Interestingly, the interviews found that informants' views on strategies were varied, especially on how they perceived the importance of organisational strategy to the practice. A senior partner from Practice A stated that with the considerable interference from the Government, medical contracts were perceived to make practices reactive rather than proactive.

> *We have no input as to whether there is an increase in funding or decrease in funding. We don't usually find out, maybe April in the financial year, sometimes we don't get changes until August or September in the year of which some changes are taking place. So, it is pointless of having a wonderful convoluted strategy about what we want to be, in fact we have to be reactive to what get by the politicians (PA.D1).*

While such a perspective shows a different opinion, it also contributes to constructing a whole understanding of the dynamic of strategic process in practice organisations.

137

7.3. PRACTICES' NARRATIVES ON ORGANISATIONAL STRATEGY

Following the descriptions of the practices' strategic orientation, this research draws on the collected data to discuss the foremost narratives on the practices' strategies.

7.3.1. EXPERIENCE OF BEING THE FIRST-MOVER

Each practice was proud that it had been the first-mover in health care services. Although they did not interact with each other, three of the practices, A, B and C shared a similar narrative, that being the first mover gave them an advantage especially in meeting the QOF challenge.

> *We stand very well I think. In fact that we always said that even before the QOF come in. We found that we're always not the first, but we're always ahead of the game, that how our voice try to do it. I mean, interestingly, recently to do the swine flu vaccination, which is not really part of QOF although having to attain target, we took it on run with it straight away and found we're actually ahead of the majority of other practices as having dealt with it (PA.A1).*

> *Well, you always think that you're the best, don't you? I mean, I think we do set very high standards, I think we're historically [...] we've been leaders in many fields in this practice and, sometimes to the dismay of some of our colleagues, but if you're the first in then often you do have to put up with resistance, but I feel we're, in a lot of respects, ahead of the game, ahead of the game (PB.D3).*

> *For example, as in weight management because obesity's been. It's a big issue and we've been working on those sort of issues for quite a while now. Once it becomes QOF-able, I think we will have something in place already because we've been doing it previously too. If they decide to put it onto QOF (PA.N1).*

These narratives justified the practices' endeavours to cope with QOF. They imply that the practices had strong and embedded organisational routines in their activities that were aligned with QOF requirements. At the same time, they maintained that the processes needed to respond to QOF were not easy. Various

adjustments to working practices had been put into place to prove that the practices were worth the QOF money.

Most informants associated their organisational routine activities as evidence that strengthened the practice identity of being the first-movers. Such an identity was highly reflected to their day-to-day activities. An example of this related to the implementation of IT systems in the practices. Identifying itself to be as a 'forward thinking practice', Practice B was among the early adopters of System One.

> *Probably this practice is quite directionally innovative and forward thinking, so much as getting the new IT system and System One, we're the first one to have got that. More innovative when you think about things like research and teaching status and things like that. So we look at opportunities that are available and try and pursue those quite aggressively (PB.D2).*

Interestingly, Practice C represented a contrasting situation. Although it also identified itself as a 'forward-thinking practice', Practice C was one of late adopters of System One, as the practice needed a longer time to prepare itself for implementing the system (PC.D5; PC.A1).

> *I think there's been quite a big change over the years. If we went back to 2001, we didn't even have any computers. My former partners were very much against computers, and they only latterly came in, we were one of the last practices in [X] to become computerised. So, having done that, it was only because we were computerised that we could do anything like QOF where we can look at results and get information readily at our fingertips. Prior to that we couldn't do that we had age/sex registers and manual registers etc, which is a bit archaic now. I think it's meant a lot more work, time spent at your computer doing that, a lot more. If I go back 10 or 15 years, I had 2 or 3 hours in the middle of the day free (PC.D5).*

This narrative provides valuable insights into how practices perceived their strategic position amongst other practices. Some practices showed an alignment of this perceived strategic position with how they identified themselves. However, this was not always the case, as evidence presented a contradiction between some practice's strategic orientation with their previous path of practice.

7.3.2. CONSISTENCY ON PATIENT-CENTRED ORIENTATION

As stated above, differences in practice characteristics did not seem to affect the practices' attitude toward patients. All the informants were aware that patients were their priority, and this was part of a widely shared and strongly held value amongst the organisations members.

> *We're just trying to do the best for our patients, and patients are the centre of what we are trying to do. Not our position amongst other healthcare organisations around us. We're not trying to in a competition [...] we're not looking outward (PA.D1).*

> *I think this practice is very patient-orientated, and it always has, both when we were a smaller practice, we always have been centred around the patient and patient-care and making sure the patient's getting the best treatment and also the best experience and that's an awful modern word, patient-experience but I mean it's true in a way but we've been doing it for years, it's just been given the label now. But especially with the move [...] it's not just for the staff here. It's the big change for patients who'd previously been going to the same place for the last 40 years, so we've had to sort of really support the patients in the move as well. I think that's one of the basic values of this practice is looking after the patients (PC.D3).*

> *We want to give the best service possible for our patients [...] and have well-trained staff, give them patient-centred care; make sure the patient has their say as well because it has to be a contract between us and the patient. It's a very forward thinking surgery (PB.N1).*

Specific to Practice C, most informants built their narratives of organisational strategy by associating it with the merger, when they elaborated on their responses to both QOF and the merger process. This reflected how informants were aware that both QOF and the merger were critical to the practice's existence. The pressure on QOF target fulfilment was intensified, because the practice had to deal with the moving-in process and experience the first year of working together under the same roof.

7.4. THE DEVELOPMENT OF PRACTICE STRATEGY

Although the interviews involved participants from different professions, it was only partners and practice managers who were able to explain the practice strategy in detail. This was due to their involvement in the development of the strategic direction process. Financial investment in the practices, especially for partners, required them to engage intensively in such a process.

> *We have money tied up in the practice, we have invested money in the practice, when a partner joins the practice, we pay money into the practice, for the building and the stock of the drugs and everything we have, so we have a financial interest to make sure that the practice works well, and works well as a business (PB.D1).*

> *You've got specific things you have to achieve, which does tend to divert your time into those areas, possibly at the detriment of other areas because obviously finance is a big important part of the practice. Without hitting them and achieving the money, the patients suffer as well in that respect (PD.D1).*

For the four practices, the process of defining strategic direction was not easy. Practices were bound by the rules and regulations set up by the Government. Indeed, it was confirmed by informants that government played a considerable part in shaping practices' strategic direction (PA.N1; PA.A2).

> *We were responding to what the government wants, and we will always oblige providing help to the patients (PA.A2).*

> *We don't have a strategic plan, I don't think for the next 5 or 10 years, because there is a lot of uncertainty at the moment, in terms of the income that we get from the government, but each year, we review our strategy a bit. But I am not sure; I can't say that we have one overriding strategy. But we have strategies to manage with the forthcoming year (PA.D4).*

In general, practices had a strategic plan which covered a period of 2-3 years or at most for 5 years. Frequently changed rules and regulations made it less possible for practices to establish a long-term strategy (PA.D4). One senior partner in Practice A asserted that having a well-defined strategy for the running of the practice might not be necessary, due to the continuously changing regulations. Establishing an organisational strategy meant that a practice should be able to determine its

direction and ways to perform better, which to a large extent, was less possible to do. It was argued that the massive political structural arrangement of the NHS contributed to such difficulties.

> *We don't really have a strategic plan, because effectively we work in this enormous monolithic structure of the NHS, controlled effectively at the whim of the ministers, the politicians. Our contract is an Act of Parliament, if we choose to break it; effectively we could break the law. If the Government decide that they want to change it, they just pass another ACT of Parliament and they change it. We can't have a meaningful two way negotiation. So within those constraints, it doesn't really matter two hoots our vision is (PA.D1).*

Interestingly, in most practices, while informants were able to explain both the strategic process and the direction, they were less sure that it was written in formal documents.

> *We don't have anything written down and one thing we're actually in the process of doing at the moment is trying to do a business plan for the next few years with the partners who are going to be here from August. I suppose there are six, say, six key actions for the practice over the next year to three years, and get a GP to work with so we can kind of manage whatever needs to be done under those headings (PD.A3).*

On the question of how QOF influences practices in their strategy development, one of the partners from Practice A asserted that it pushed them to think more about survivability than before. Changes in QOF measurements made practices think harder about how to improve their performance, as it would considerably affect their financial situation.

> *I think it made us think more about survival. Because the QOF points are getting harder and harder to achieve. Because there is a financial tool, with which the government can control our income. [ ] it's harder to get. So that we know that there's a sense of having to work as going on a treadmills, going faster and faster in order to justify the same amount of money or less amount of money over the last four five years (PA.D4).*

A similar view was shared by a senior partner in practice B who reported that considering the potential difficulties in future funding from the Government, it was vital for practices to think outside the box. Practices needed to think about the

wider environment or 'market' rather than focusing on QOF alone. Practices extended their efforts through innovative thinking and entrepreneurial orientation. These factors were believed to derive a practice to stand ahead of others.

> *[...] because we have to recognise that in the next few years there will not be as much money for health care, because of the current economic system in the country. So, we have to say 'well if our income is going to be reduced because there is less money for us for GMS, we'll have to go away and look at other areas of deriving income'. So, that's probably more market driven than QOF (PB.D1).*

> *We now work a lot more co-operatively, and moving forward we're looking at enhanced services, looking at the QOF, building this place. We're looking forward to developing all these other services. One problem we keep on coming across is the government moving the goalposts. So, we try to set out what we are going to do and what we can potentially do (PC.D1).*

In developing their strategic decisions, the practices went through various aspects of assessment, including an evaluation of their points of strength and weakness, as well as the opportunities and challenges they needed to face in the environment. These processes represent how organisations manage changes and ensure that an organisation has adapted to the dynamics of change in both the internal organisations and external environment, to ensure their survivability. The practices took into account their previous achievements and even failures.

> *We do accounts each year, we do cash flow predictions for next year, to work out what we've got to spend, oh yes, we do all of that. We do an evaluation each year, because each year that gets finished and you have whatever your points are for the year. You have a think about other areas you missed, could we have done better on some of them (PA.D1).*

> *There were times when we knew about what our strengths, what our weaknesses, how come we best use these strengths for the practice then, and those sort of things, you know, what people want to do in the practice (PA.D2).*

Informants compared the current situation with what they had already experienced within the practice (PA.N1; PC.D6). The informants were confident about the practice's achievements, which helped the practices to achieve what they were targeted to.

We offered a high quality beforehand. I suppose it's difficult to quantify what high quality is until it's set out by something like this. But as I say, I think we perceive if you do well in your QOF then you're giving a high quality of service, and that's part of the reasons to try it, as well as financial, is to try and hit the targets, is that you want to be shown to be giving a good service (PC.D6).

We look at what it is we're aiming to achieve really the patients numbers, the size of people, we do searches say for something like ischemic heart disease. We'd do a search on the number patients we have with ischemic heart disease in the practice, to figure out how much of a workload, how much time commitment that is, make sure we've got the staff numbers appropriately diverted to that area of access, and just follow it through that way(PC.D1).

In addition, practices reported that the assessment of their internal strengths and weaknesses required them to make some adjustments to resource arrangements. Practice C, for example, aimed to become a training and research practice. This strategic objective enabled the practice to engage more in educational roles for both students and nurses. However, the evaluation of internal resources put forward that practice did not have the required competence and resources to do so. Hence, the partnership decided to recruit registrars to fill the competence gap. More importantly, such adjustments also took into account both business interests and clinical perspectives.

The plans we have had have now worked. For the future, we've a new GP starting, and hopefully they will start bringing Registrars into the practice and become a teaching practice again. That's been one of the long-standing goals of the practice (PC.A2).

Practices also proactively explored possible ways of meeting patients' demands through engaging in scanning the external environmental. It provided them with opportunities to think beyond the practice boundaries. External environmental scanning was seen to support the practices' intentions to grow, as stated by one informant in Practice B, *'you have to grow, you have to look outside'* (PB.A2). Similar to internal resource assessment, practices framed potential opportunities and challenges in the external environment through their competences. In this way,

they were able to identify gaps between opportunities and what they were able to provide.

A new branch opened in that city. It's a big, big thing for us and I think we could take our skills over there and do a really good job because I think there was maybe a gap in the city for a really good, well-motivated team of GPs and nurses. I think we've done really well to set it all up in the time that we've done it in. We've got staff out there, we have all volunteered to go over and help as well if they're short because it's still sort of getting up and running (PB.N1).

I think we are trying to look at the wider picture in terms of the financial climate and the practice based commissioning, and what other services we can offer. I don't think we're particularly advanced in doing that in terms of other practices, but I think we're starting to go down that route, and think about other things we might be able to provide, so it's quite, actually really exciting time at the moment (PD. A3).

A practice's ability to scan their external environment was claimed to be beneficial in shaping their paths of competence and justifying the services provided for patients. Practice B, for example, did not provide services related to drug rehabilitation, considering that there was no need for that particular service in their patient population.

I don't know anything within QOF that we wouldn't offer, that we don't offer. And other general, enhanced services particularly we offer nearly all enhanced services apart from drug rehabilitation, because we don't have, we're not a practice that has a high drug problem, inner cities probably would have, but we don't, we're quite a middle class sort of practice really, to the patients that we feed (PB.A1).

A similar view was also shared by Practice D, which was the only practice located in a semi-rural area. A practice's competence was claimed to be built over time through interaction with its external environment. The attention was focused on the characteristics of the surrounding population.

I've grown up in this area so I'm very protective against this village, and I've got very high standards about how we should treat the elderly population. So, I know a lot of the patients that come in, and I think we've always provided, I know we have, quite a good standard of care to patients and I believe that we

should continue to do that. Whether it's how you measure that quality and how you do that. There's all sorts of tools that people measure things with nowadays but word of mouth is a big measure to me when I'm in the village and it's got a really good name has this practice. You can't say that for everybody obviously, but good practice and friendly and a good approach and just being open and amenable to patients. Because it's about them not us (PD.N4).

Informants also noted that a strong attachment to their practices' environment meant that the practices were prone to changes in that environment. To some extent, such changes were believed to affect a practice's identity. On the other hand, attachment to the local community meant that significant changes in the community might potentially affect a practice. Practice D as an example, experienced a huge change in its strategic direction as a result of changes in its environment. This also represented a departure from the practice's initial 'identity'. Practice D had identified itself as a community-based practice since its initial development. This identity was argued to become its strength in dealing with the healthcare needs of the local population. However, as the population grew larger, there were shifts in the demands for healthcare, which required the practice to make adjustments. To some extent, the practice felt that such changes and adjustments brought about potential challenges for the practice's identity as a community-based practice. The impact of QOF on a practice's identity will be shown in chapter nine.

I think we're in a state of flux really, because for years it's been a very local practice where the communities it's served were smaller for a start, and the GPs were here for years and years, so you had a very close knit cohesive community, with the practice perhaps at the centre of it. [...] A very close relationship, everyone knew each other, they all knew the doctors and what was happening, and I think there's been a period of change where the communities themselves have developed in terms of numbers, we have lots of new developments, far more social mobility, which affects the local populations. The practice has got bigger, so we've had new GPs, and GPs who are not working full time, so they're part time, so it's harder for the patients to see the same GP, and I think as we've gone on, we've probably lost some of the identity we had as the really community focused, that I think a lot of

> *patients, particularly the older patients remember and want, and that's a challenge for us, because I'm not sure how feasible it is for us to be able to have that identity, or be able to do that at the same time as meeting all the needs of everyone who's demanding certain services, certain targets to be met (PD.A3).*

Hence, the relationship between practices and their environment can be seen as a cycle that potentially strengthened or weakened practice's strategic strengths.

While internal resources and vigilance towards the external environment were believed to be crucial factors in strategy development, judicious consideration of the possibility of achieving a target was also critical. Practices needed to be prudent in making strategic decision. Hence, they drew on their intellectual judgment to learn from previous experiences and assess the feasibility of alternative decisions, to ensure that the benefit outweighed the costs of choosing such a decision.

> *And it's a times to fight between whether we try to achieve it or not. But our range is always trying to reach the maximum point if we can, although we do look at it and say "look, that's totally unachievable, we're not even gonna try. Let's channel our energy to some of the parts, like ethnicity for example, we struggle to get that question answered correctly, or struggle to get it answered all the time, and so we've decided that's not worth so much, let's not even bother, lets lose that point, and let's go for something that's more worthwhile to the patients, you know, in a medical way (PA.A1).*

In addition to those factors, some informants also emphasised the necessity of organisational size and the role of leadership in strategy development. The fact that practices were categorised as large practices brought confidence that they had greater resources compared to small-size GP practices. This included physical resources (i.e. buildings, facilities) and non-physical resources, such as skills, knowledge, and expertise. Indeed, informants tended to associate their organisational size with their knowledge or expertise capacity. One partner in Practice B asserted that being a large practice tended to be beneficial to cope with changes as they had the resources to do so. Having such expertise enabled them to tackle any difficulties competently.

[...] because we have a lot of people working for us, it makes us a very strong, robust, resilient organisation. We feel we are better placed perhaps to take advantages of some of the things which are available than a smaller practice, where they do not have the expertise. They do not have the number of people to actually pick up these new exciting things and drive them like we have done in the past 3 to 5 years (PB.D1).

To support strategy development, informants also cited the importance of good leadership. The role of leaders was perceived to be critical in ensuring that everyone and all resources in the practice were working simultaneously. Leaders should be able to push forward all the efforts as well as manage resources to achieve organisational objectives.

[...] the fundamental thing is to organise anything well you have to lead it as well, because you have to understand the balance of relationship that [...] that needs. The balance of the allocation of tasks, the balance in the allocation of resources, the balance in the consideration of who can be, who's good at doing what, and a balance in the consideration of individual needs and task needs (PB.A3).

It should be the leader really, it is your leader[...] with a good driving force, coupled with one or two of the doctors who are always on the ball, just to keep pushing it forward (PA.A1).

On the whole, the interviews provided valuable insights into how practices determined or changed their strategic direction. There was a considerable emphasis on the importance of the practices' strengths and weaknesses in strategy development.

7.5. PERCEIVED CHANGES IN ORGANISATIONAL STRATEGY AFTER QOF

7.5.1. SHIFTING OF PRIORITIES: CHRONIC DISEASE MANAGEMENT

One of the partners in Practice A stated that the practice vision was to maintain its personalised medical service for patients. Its strategic plan was developed in alignment with QOF-related works.

> *Our joined vision is really just simply to offer the best personalised care that we can. I think the practice is gradually changing, with the recognition that and a lot of the QOF work (PA.D4).*

Most informants referred to the shifts in how practices were prioritising health care services for patients. Virtually, all informants agreed that their practices focused more on providing chronic disease-related services than before.

> *Yes, there are differences in priorities, yes. Because we monitor things like cholesterol more often and blood pressure more often, which is good (PB.D3).*

Shifting priority toward chronic disease was represented through opening more chronic disease clinics and nominating clinical leaders for each chronic disease area. These arrangements led to a more structured chronic disease management, which could not have been possible without QOF.

> *I think the first thing that we did was set up more focused chronic disease clinics to run alongside with the QOF. Before, the patients would just come to certain things and medication review and see the GPs. Whereas we set up clinics which the practice run because you're picking up more, identifying more chronic disease is actually increasing in numbers as well (PD.D1).*

While nomination of clinical leaders made individuals specifically concentrate on their responsibilities, informants concerned that this potentially led to a fragmentation of care. GP partner informants added that prior to QOF they had been more generalist, as they had not just focused on specific diseases or only taken responsibility for specific areas.

> *In the fact that where we're, having nominated leads for certain areas, whereas before we were all a little bit more generalist, all our chronic disease patients would come in and see us and we would overview them no matter what chronic disease area they had. Whereas now they're getting diverted away from us into certain chronic disease clinics, with a different doctor as a lead, for that part of their management, and then for another part of it. An ongoing problem that isn't in QOF they'll be coming to see the regular GP that they have familiarity with, so it fragments the care a little bit. But I still think it's probably a*

positive thing that chronic disease clinics are set up and things aren't missed really (PD.D1).

Although priority was given to particular chronic disease areas, physicians maintained that they did not neglect other diseases. On the other hand, giving priority to the treatment of certain diseases over others might potentially increase the frequency of seeing the same patients over several appointments for different health problems, rather than treating and working on various different health problems in one consultation. In turn, this was argued to lead to an inefficiency of operation.

> *Because there's certain aspects that if we don't do it, we don't get paid. So, you have to perhaps prioritise that over some other things that might be a priority or perhaps a clinical interest. So there is a balance there that has to be had. We try on other projects to look at other aspects. One example would be osteoporosis and there isn't QOF for that now, whereas there's talk there might be, so then we've done some of that work under prescribing budgets and prescribing incentives. So, we've tried to do other work under other hats etc [...] but that's always a danger that you're seeing one patient three or four times because they've got loads of different problems. I suppose that's another problem as well, how we manage a patient that's got multiple diseases, whether we do it all in one go or see them individually for each thing (PC.D6).*

7.5.2. SHIFTING OF PRIORITIES: FINANCIAL ORIENTATION

For the practices, the decision to shift direction toward chronic disease, as required by QOF was inevitable, as it correlated significantly with financial issues. Practices needed 'fresh money' to fund their operations and QOF provided the opportunity for the practices to gain a new income stream through linking organisational performance with financial incentives. Hence, practices needed to ensure that QOF targets were achieved. The QOF contribution to the practice income reached between 20% and 30% of their total income.

> *QOF is more than one sixth of the practice's income, so the size will matter. Income, with total turn-over for this practice is about £ 1.5 million in running cost. So it's £250,000 is what QOF contributes, so it is a large amount of money. Effectively,*

> *QOF is the new money that we got in 2004. Without it, there's no new money on the table. So, if you want any new money, we have to work on the QOF (PA.D1).*

Along with QOF, practices also engaged in various medical contracts offered by the Government. This provided a portfolio of income streams for the practices. One informant stated that different contracts contributed in different ways to the total income of the practices. Comparing between Practice B's main practice and its branch practice, the QOF contribution to income was more in the main site than the branch.

> *It's different from our contracts in that neighbouring city, which is Alternative Personal Medical Service contract, APMS contract, whereby QOF forms a small part of a range of KPIs. So, in that city in fact, the QOF targets are worth only 1% of our income compared to here, where it's almost 30% of our income. Alternatively, however, the APMS contracts have introduced a batch of other key performance indicators that add up to a total of 15% of our income. So, there is difference, there is disparity in the contracts (PB.A4).*

Virtually, all partner informants highlighted that QOF had pushed their practices to think beyond what they had, in terms of income possibilities. Partners looked for alternative ways to ensure the sustainability of income for the practices. Practice B, for example, decided *'to go away and look for other areas of deriving income'*. It diversified its services and businesses. The partnership also expanded the practice area coverage by opening a branch in a neighbour city. It is worthy to note that the practice's intention to diversify businesses was less possible to pursue prior to the *new* GMS contract. However, a partner informant emphasised that engagement in the diversification of services should be carefully planned and conducted. Engaging in private healthcare services for example, might possibly affect income generated from NHS.

> *Before 2004, diversification was much more difficult and there was less pressure to do it, and less incentive to do it. But since 2004 it's been much more possible to look at providing alternative services and being able to bid for them and look for other lines of service provision. Not only within the NHS but also outside the NHS. But you still have to be careful about the amount of income you generate from private practice, because it*

can affect your income from the NHS as well. If you earn more than 10% private, then it can affect some of the reimbursements you get for things like premises. However, if you run it as a separate company, like we've developed a branch, then it doesn't apply. So by having two parts, by having this practice and the branch, it allows us to look at the private sector with more freedom (PB.D4).

In addition to the positive impact of QOF on the practice income, some informants expressed that QOF enforced practices to be more money-driven and business orientated than before. QOF procedures were perceived to focus more on targets or data fulfilment than on the state of patients' health. While it was widely known that such a shift was necessary for their existence, it caused frustration for health care professionals, as they were concerned about undermining the practice's priorities towards its patients.

I suppose we always think of one or two others that have always been a bit more business-orientated than us and I think there's been a danger in the past of saying, 'oh we're not business-orientated' we're patient-orientated, but you've got to be both these days (PC.D6).

[...] because our management has become necessarily so scared towards finance, our clinical management, sometimes, some partners get more dogmatic, more fixed, on that. And they will, sometimes, go to a great extent trying to improve the income. Sometimes, that can be frustrating to others, because [...]. But at the end of the day, it is quite small, but [...] as it changes relationship between people. No, I think it would be probably the same anyway, some people would concentrate become more on money, some people would concentrate more on care. Because I think at the end of the day, we probably all accept that both are important (PA.D4).

It became more business orientated I think, although we tried to carry on as very much a rural practice. The GPs at that time had been here a lot of years, two of ours nurses had been here a lot of years, so you know your patients and it wasn't as target driven, then I'd say, it's only over the last few years it has become more target driven (PD.N3).

Informants also noted that QOF as a new source of income had rearranged the relationship between individuals and the basis of thinking about why activities

were conducted. More detail about the impact of QOF on the relationship between individuals in GP practices will be presented in the next chapter.

> *I think it changed the relationship between the supporting mechanism, the other disciplines and the owners, and the GPs. The other thing it did was it raised the profile of money, right to the forefront. It basically said 'reward is money', 'delivered care is money' beforehand it was almost invisible to the majority of the practice, they didn't really see that. Now they know (PB.A4).*

7.5.3. MOVING TOWARD A MORE PROACTIVE HEALTH CARE SYSTEM

QOF rewarded GP practices according to their performance in achieving predefined quality measures. As chronic disease patients became the focal point, all practices set up recall/appointment systems to ensure that those patients got their health checked regularly.

The establishment of this recall/appointment system changed the nature of how health care was managed. Instead of waiting for patients to come to the practices when they were ill, this system invited them at regular intervals. If patients were not able to come for their scheduled appointment, practices re-sent the invitation up to three times. If they failed to attend the appointment, patients were considered as exception cases. In this sense, informants expressed that QOF had caused practices to be proactive, rather than passively waiting for patients to come in when they had health problems.

> *The theory behind QOF was to raise the standards of particular types of care in general practice, and also help general practices move from being a reactive system that dealt with patients when they became ill to moving to a system that dealt with patients before they became ill. So, it became a health prevention system, rather than a reactive system that dealt with conditions that had already risen (PB.A4).*

> *It is clearly got more preventive, proactive. So, I am no longer dealing with just illness, but I am also dealing with chronic disease a lot more, as we all are. So, I guess it is probably a bit, if I am really honest, I think I am probably a bit better [...] at being proactive with people (PA. D4).*

To sum up, this shows how QOF affected how practices planned their strategic directions. Shifts towards a proactive health care system, as well as more emphasis on chronic diseases, were the most quoted changes in organisational strategies. To some extent, organisational strategy was seen as a reaction to a financial scheme that practices needed to comply with, as it had a significant impact on a practice's income. The following section draws a conclusion on how GP practices developed their organisational strategy.

7.6. CONCLUSION

The findings conveyed that all practices aimed to provide a high standard of patient care. However, the practices defined a high standard of services differently, definitions included providing a comprehensive quality caring service through a patient-practice partnership, meeting local the population's needs, being a head of other practices and achieving high QOF score.

All four practices claimed that the existence of an organisational strategy helped them to direct their efforts. However, with intensive regulations imposed by the Government, having a complex strategy was considered to be pointless, as practices were bound to follow government rules. In this sense, medical contracts along with their embedded regulations and procedures were argued to make the practices more reactive in defining their directions.

With the implementation of QOF, all informants agreed that it led the practices to think more about obtaining funds. Practices became more target driven and were managed as businesses. With less money available in the future, all of the practices' efforts seemed to be directed to ensuring that maximum targets were achieved and funding was secure. In doing so, practices were pushed to shift their priorities to chronic disease management as required by QOF.

To accommodate the shifting of priorities in their strategies, practices established chronic disease clinics and tried to find other opportunities to maintain their income. Along with this, they made changes in the organisational structure by nominating clinical leaders, who monitored target achievement in particular disease areas. These additional new posts showed that changes in strategies had driven changes in organisational structure. The detailed impact of the QOF scheme will presented in the next chapter.

CHAPTER 8

ORGANISATIONAL STRUCTURE

8.1. INTRODUCTION

As we discussed in the literature review part, changes in organisational strategy might lead to rearrangements in the organisational structure and to a re-stratification of the roles. The previous chapter presented how QOF compelled the practices to make several changes in their strategies, based on their organisational memory and competence. This chapter shows the impact of QOF on organisational structure of the practices, and how the practices tried to pursue their strategies and maximize their QOF score by restructuring themselves.

8.2. THE STRUCTURES OF THE PRACTICES

8.2.1. STRUCTURAL ARRANGEMENT

Again, all practices involved in this study were categorised as large practices, serving more than 8,000 patients per year. Practice B, in particular had more than 19,000 registered patients. Consequently, the practices reported having relatively large number of human resources. Practice A, for example, comprised nine physicians, three practice nurses, one health care assistant and thirteen administration staff. To coordinate people and activities, practices needed to arrange their structures effectively.

Despite the large number of staff, all four practices claimed to have relatively flat organisational structures with limited hierarchical layers. All partnerships were at the top and shared the leadership of the practices. They were on an equal footing in that no single person was dominant over others in the decision making processes. Three practices were a mixture of male and female partners; however,

Practice D was strongly characterised by female dominion as there were no male doctors or staff.

Based on the interviews, it seemed that all practices adopted a similar structural arrangement. In most practices, the practice managers served as the second top layer and were directly responsible to the partnerships. The structural arrangement up to this layer was very clear, which was in contrast to the structure of below this level. The hierarchical relationship between nursing teams and administration teams was unclear. Yet, both teams were positioned underneath the practice manager level. Lower level healthcare professionals, such as health care assistants and phlebotomists, were reported to be at the bottom, but at the same time, were included as part of the nursing team. Despite this complex arrangement, they worked more as team-based units and had flexible relationships between the layers and teams of professions.

The relationship between GP partners as 'employers' and the practice manager as an 'employee' was asserted to be complicated. Practice managers were employed by the partnerships, but they had a responsibility to manage and coordinate the partners to achieve the practice objectives.

> *I work to them, they are my employers, but I also have to manage them, which is quite a difficult thing to do and I think it's one of the key challenges in the job, in that I have to upward manage, so if I know, say, one of them is a lead for something but they're not doing it, I need to be able to try and push them in the right direction, get them to do things that they might not particularly want to do, get them to see points they may not have realised(PD.A3).*

> *[...] off course as GPs we sit uneasily because we're both a team in ourselves and we sit between or above the practice manager because we employ her, but we are a small hierarchy (PC.D4).*

While both partners and managers were considered to be at the top of the structure, they did not share similar privileges in the decision making process. In practice D, for example, the practice manager practically headed the partners' meeting and her opinion was sought and appreciated by the partnership, but she was not eligible to vote on the final decision.

[...] she's not actually eligible to take the final vote. She would see herself, I'm sure, as answerable to us. But we very much see her as managing us in respect to our workload, our time, our clinics, how we're structured. She's our manager in that respect. As a manager is, we're not managers, we're GPs (PD.D1).

In Practice B, the relationship was even more complex as the practice manager was also a partner. The practice manager came from a non-medical background and also acted as a managing partner for the partnership-owned company. The *new* GMS contract made it possible for practices to share partnerships with non-practitioner individuals.

[...] but not unrelated to business change, was the thing that introduced QOF, was the new GMS contract which came into being in 2004-2005, and that, allowed general practices to be owned by people other than the general practitioners. That had been the case before, but it was slightly difficult due to the way the pensions were paid and calculated (PB.A4).

In general, practice managers acted as an interface between staff and partners as well as hubs in linking the practices to local communities. They were responsible for scanning the demands of the local community and bringing such information to be followed up and accommodated by the practice.

In terms of general linking with local services, that's where the practice manager also comes in and she goes off to practice manager meetings to find out what the practice should be doing, what are the index locally and nationally, and then she'll feed it back to the group as a partnership, pass that information to the others either through practice meeting or with emails (PA.D5).

For nursing team, the arrangements were relatively different. Most practices pointed out that nurses and HCAs had a leading or senior nurses to report to. Lead nurses were responsible to the partnership; but, in essence, their line managers were the practice managers. Hence, for administrative issues with nursing teams, lead nurses reported to the practice managers. Alternatively, for clinical issues, they reported to the GP partners responsible for particular areas.

Regarding the internal team arrangement, nurse informants reported that they had certain procedures which they needed to go through before an issue reached the

lead nurses or nurse manager. Initially, individual nurses consulted their nursing team when an issue occurred. When unresolved, advice from senior nurses was sought before issues reached lead nurses or nurse managers.

> *If I had a problem, I would go through my nursing team first and then I'd go to the senior nurses and then maybe nurse manager. I think that's how they prefer it, because if we do have a problem and if it's a nursing problem, the nursing team would probably look after it and help sort that out (PB.N1).*
>
> *[...] as for clinical issues, we would report it to the doctors of whatever specialist area. We do have doctors with specialist knowledge in certain areas, diabetes, if we were concerned about a patient's care, I would first approach the specialist practice nurse for advice and possibly the doctor whose area of expertise that was (PC.N2).*

Compared to the other practices, Practice D had very different arrangement on how teams were coordinated. While other practices had team leaders or deputy team leaders for groups of professions, practice D did not have any such posts, but were at the point of considering having them.

> *Do you have team leaders? No, not yet, we're considering it, we're thinking[...]we're trying to get different teams, at the moment everybody in the office does everything, some of the staff are pretty new, member of staff have just started and we're thinking about that, because it's just so much to learn, we're trying to break it to be different teams. And we're in the process of thinking should it be a team leader for each team or whether I can run it all, we're in discussions at the moment (PD.A1).*

Related to reporting arrangements, whenever there was a clinical issue within the team, nurses in this practice raised it with the partnership. Conversely, if there was administration related issue or a complaint from a patient for example, the practice manager was consulted. Interestingly, none of the nurses in Practice D had reservations about not having a lead nurse. The reason was that all nurses were the same grade and historically it had always been like that. However, they also emphasised that they would not mind having a team leader, whose would preferably be from outside the team and has a nursing background, because a nurse would understand nursing roles better than if it was a physician.

I think a nurse would be better, because they understand your role and your workload and I think as a GP you work very differently to a nurse, it's a different role, so I think somebody who manages you who understands your role has got to be better than someone who sees it from a different point of view (PD.N1).

All four practices reported to have a similar arrangement for the administrative staff. The administration team, including receptionists and clinical data manager were answerable to practice managers. This means that any reception or front-desk related issues were reported to the practice managers. Practice D, had a slightly different arrangement as it had added the position of practice management assistant and office manager, whose responsibilities were spin-off tasks of the practice manager.

To sum up, although all practices claimed to have a flat structure, hierarchical arrangements existed to some degree, which served as unique characteristics of the practices. There were similar reporting mechanisms, with two different ways of reporting. When an issue was related to administration or management, the practice managers were the ones to report to. Whereas, when there were clinical issues, health care professionals discussed them with the partners responsible for particular clinical areas.

8.2.2.   BASIS OF JOB RESPONSIBILITIES

It is beneficial to explore how job responsibilities were assigned in the practices, as it potentially contributed to how people perceived their roles as either different or convergent with others. There were key factors to consider when practices distributed responsibilities. One of them was the number of employees needed for certain positions or particular responsibilities. This was worked out through assessing the practice's situation. One partner in Practice D underlined the importance of taking into account every aspects of the practice, such as the size of population and the number of patients with certain diseases. This was crucial for estimating the potential workload for each health care professional, as well as the possible time needed for consultations.

We look at what it is we're aiming to achieve, the patients numbers, the size of people, we do searches say for something like ischemic heart disease. We'd do a search on the number of patients we have with ischemic heart disease in the practice, to figure out how much of a workload, how much time commitment that is, to make sure we've got the staff numbers appropriately diverted to that area of access, and just follow it through that way (PD.D1).

Other factors considered were qualification, expertise and skills. All partner informants confirmed that the distribution of responsibilities was conducted in alignment with the competences of the staff; in particular for clinical responsibilities, the practices had to ensure that nurses and HCAs were qualified and trained well to perform particular clinical tasks.

Expertise and qualifications, so starting with the senior practice nurse down to the health care assistants being the least senior. But all valuable members of the team. I don't believe in having this complex of senior people. It depends on their degree of expertise. But now we have got someone in a more senior position, because of her specialist expertise (PC.N2).

We'd never let nurses in this practice. You know there's the [...] the clinical governance, we're very strong on clinical governance and you know we have a very strong training and mentoring process here, so until people are fully trained and capable, we don't let them on their own (PB.D3).

Aligned with all four practices' intentions to ensure quality health care delivery, they supported staff development through providing training, as well as accommodating career progression. Practice B, for example, decided to invest more in the supervisory management team, which implied that most managers or team leaders were developed internally. This decision also intended to support personal development as well as career paths, which reflected the practice's commitment to the process of learning and ongoing skill development.

[...] the senior nurse has been promoted to nurse manager and because that takes her more off the clinical skills side because she's got a team to run now, it means that the other nurses, we like inherit roles. So, if we decide that if one of the nurses wants to do nurse prescribing, she can do that. She can go ahead and do that because there are other nurses that can take her role and learn her skills so it's definitely onward going all the time

but nursing's like that anyway. It's not something that sits still constantly. You've got to have proof that you're learning; you've got to have proof that you've got the qualifications, the skills and it's something that's ongoing all the time. Sometimes it's a bit difficult but you try to keep up with it all (PB.N1).

These staff development programmes and career progression opportunities were deemed to be good motivators for staff and were perceived to reduce the possibility of memory loss due to staff leaving the practice for a better career elsewhere.

We need to go on training courses and keep up with updating our skills [...], because we've got to have specialist knowledge and expertise now in these areas (PC.N2).

I think my role's changed a lot since I came to work here. I felt that when I came at the beginning it was much more doing dressings and treatment room work and as time's moved on I've done courses, I've had to do courses so that I can see the patients for reviews. So, I think that's changed I think my role's increased from what it was when I came to work here, and I like to work here (PD.N1).

In addition, practices also emphasised the contribution of years of experience in an individual's knowledge and skills. As individuals were continually doing similar tasks or activities, the routines enhanced the level of individual knowledge in a particular task. Thus, individuals became so highly skilled in conducting tasks that they did not need additional effort to do so.

When I first started I'd not done practice nursing before. Now I've learnt to do all the things required, all the chronic disease management, wound care and things like that, so, obviously my responsibilities have increased and my skills improved. I manage my own wound care, I do my own Doppler. I recall my own patients (PC.N1).

8.2.3.   SPECIALISATION AND ALLOCATION OF EXPERTISE

Being large organisations, all four practices had advantages of having more resources and expertise compared to those of smaller practices. Informants argued that a wider range of resource and expertise enabled the practices to engage in various activities, both clinical and administrative.

A lot of things that other practices possibly wouldn't take on board, we do. But we are a bigger practice, we've got a lot of admin staff, I believe other practices are half our size in patient numbers, so of course they haven't got the administration that we've got, so you can't implement. To some extent, they're more selective in what they offer to their patients, whereas we offer everything really (PB.A1).

Consequently, practices needed to deal with the allocation of expertise. This was important as they needed to deal with the extent of knowledge and capabilities employed to do particular clinical tasks.

Although GPs tended to be generalists, each had an interest in a certain area or sub-speciality. Such competences supported the practices' endeavours in offering a wider range of healthcare services for patients. Indeed, this was considered to contribute to the strengths that resided within people working in the practices. Interestingly, although no formal directory of expertise existed in the practices, informants were relatively well-informed about their colleagues' expertise. This kind of expert knowledge helped them to meet patients' preferences by referring patients to clinicians with a particular expertise. However, due to time limitations, the number of patients, and the nature of working patterns (part-time/fulltime), the intentions to meet patients' preferences were not always realised.

In the fact that we're having nominated leads for certain areas whereas before we were all a little bit more generalist, all our chronic disease patients would come in and see us and we would overview them no matter what chronic disease area they had. Whereas now they're getting diverted away from us into certain chronic disease clinics, with a different doctor as a lead (PD.D1).

As equal partners with their own sub-specialities within it, that I might refer people on to if they came with a certain condition, I would say I'll probably ask you to go and see somebody else for an opinion on that. [...]. So, each one has their own little role really, or big role (PC.D6).

This specialisation also led to an increase in role expectation. As physicians became more specialised, they were perceived to be more competent than others. In turn, the knowledge embedded in particular roles was also expected to increase, so that

they became sources of information or points of reference when other health care professionals needed information on related cases.

> *It depends on what the area is, because we all appreciate we've got different skills in certain areas. If we were wanting further information on a certain area, we would probably look to that partner, knowing they knew more, to give us guidance and information (PD.D1).*

A similar specialisation-based arrangement was also experienced within nursing teams. Nurses were assigned to deal with particular diseases based on their competences. They were assessed through both qualification and skills.

> *Yes, both (qualification and skills), and time, because it's a big team and there's lots of work and lots of things crop up at different times. [...] I suppose if it was out of my skill, then they probably wouldn't ask me to do something (PB.N1).*

> *Now we have got someone in a more senior position, because of her specialist expertise. Prior to that we didn't have a Senior Practice Nurse. It wasn't deemed necessary (PC.N2).*

Although healthcare professionals possessed different knowledge and skills, they were not less appreciative of others. In fact, such differences made them understood that collectively, they contributed to the practice's successfulness in providing good clinical services to patients.

> *Everybody has different skills; everybody brings different things to the practice, so I couldn't walk into a receptionist's job and do their job. And same as they couldn't do my job either, so I think we all know our professional boundaries and we all know what we do and how we do it. We stick to our roles, so we wouldn't sort of go encroaching, trying to think, 'we can do your job'. I certainly wouldn't like to see myself as a receptionist. I don't think I'm brave enough to take on the patients that they do. I think everybody knows their roles and professional. I totally appreciate the work that they do (PB.N1).*

> *I respect our nurses and I think they're all very good at their job. I don't think we're better at what we do. We do a different job. In the same way my secretary's extremely competent in what she does, that doesn't mean I look down on her or anything (PC.D5).*

> *We all work together in a way, but they all have specific roles and job responsibilities, so when it comes to a certain areas,*

they would be responsible for that and they would disseminate information to assist us if we need to do anything to trying to get there. Information is on the computer as it needs to be (PA.N1).

The informants were aware of their significant contribution to service delivery and asserted uniformly their commitment to work as a team.

I think I'm a valuable asset to the practice, with all my years of experience that I've had. And I think I provide a good service to the patients, and to the GPs, and the knowledge and skills that I've got, I think I perceive myself as a good (PD.N2).

However, most partners emphasised that work in the practices was mainly conducted through multidisciplinary teams that comprised individuals with different expertise and skills. Regardless of differences in competence or specialisation, informants realised that they needed to work together to achieve the objectives of the organisations.

We work in a multi-disciplinary team, so you have lots of people working towards the same objective. Every person in that team has different skills and different things to contribute, but all working towards, the common aim of trying to provide good health care to the patients (PB.D2).

[…] such as say diabetes, we have a multi-disciplinary team, so the diabetic meetings will be run by the lead clinicians, the lead nurse or the 2 nurses involved with diabetic care, and the office manager and the lady in the office who's responsible for sending out the appointments to all the diabetics, to coordinate how they do the recalls, when they do the recalls who needs to come in and make sure that it runs smoothly (PD.D1).

In sum, practices confirmed that clinical tasks were mostly distributed based on both qualifications and skills. In addition, practical considerations, such as time availability, were taken into consideration when distributing responsibilities. A higher degree of specialisation means that people get more competent over time by having a particular responsibility. That degree was shown to lead to a more efficient working arrangement. A higher degree of specialisation also increased organisational complexity; hence, requiring organisations to manage it effectively.

8.2.4. COMMUNICATION MECHANISMS

The findings in the previous sub-sections provide evidence that all four practices distributed jobs and responsibilities based on competences. While this helped to allocate tasks effectively amongst staff, practices needed to ensure that there were no knowledge or information gaps. Such a necessity became more central as all practices were large in size that unity of action was important to ensure smooth operation. At this point, the practices tried to engage in good communication mechanisms. Communication mechanisms were believed to be an important factor in coordination, as well as assisting the practice to enhance the process of sharing knowledge.

> *We work cooperatively, support each other, share ideas and meet regularly (PD.D2).*
>
> *It has meant that there have been other things that we have to liaise with each other about. I mean, It requires some coordination to organise ourselves (PA.D3).*

The communication mechanisms came in different forms. Practice A for example, represented it through strong involvement of people in the system. The practice believed that people's involvement meant ensuring that all members of the organisation knew what was happening in the practice. It also helped to assist staff dealing with particular events or issues. More importantly, involving staff in relevant processes was expected to increase their commitment to the practice's policies and decisions. To achieve this aim, some mechanisms including reports, meetings and feedbacks were considered necessary, to create sharing of information and knowledge in the practice.

> *Well, it is important that people are involved, for example we are looking questioning why we are, we know why we use to put significant events, everything is shared. So, I don't make the decision, I go to the girls then I ask, what do you think about that, then I talk to the lead GP, what do you think, what are the implication, what would be the consequences if we change that. So, we talked in a teamwork. We think it through, is this a good idea, review it at staff meeting, once we have decided what we are going to do, review it with the doctors first. Look, this think of changes in this particularly thing, what do you think and they*

say, yeah that's fine. And we go to the girls, so communication
and the sharing the ideas are absolutely crucial (PA.A2).

A similar opinion was also shared by one senior partner in practice B who emphasised that communication was important in the practice's life. He asserted that regular meetings were used as a medium to gather and share important information. Dispersion of knowledge was conducted as a review process and feedback session (PB.D1; PA.N1). At this point, people learnt from what they had achieved as well as from other experiences as a base for improvement.

> *If you have somebody who's kind of working in a little room and*
> *they don't really know what everybody else is doing, then you*
> *can't really expect them to help the practice achieve its goals.*
> *So, a lot of it's about communication, and the practice does*
> *communicate very well, they have regular meetings, they have*
> *away days, the practice has away days for the staff, away days*
> *for the doctors, away days for the salaried doctors as well, so it*
> *is very much about communicating what you want your staff to*
> *do, to make the practice successful (PB.D1).*

Another way to share information and knowledge amongst practice members was through job rotation. It provided the opportunity for individuals to work with different people, understand different work setting, and thus, enabled them to have wider experiences. Job rotation also helped the practice to ensure that they had the stock of knowledge and skills needed for back-up in case of an emergency situation.

> *We alter that every 6 months, we do a 6 month rota and we just*
> *take it in turns [...]. If, say, somebody needed a day off for*
> *something important and they were supposed to be working, we*
> *would cover that person. We've worked together long enough to*
> *know there has to be some give and take so we'd do it for each*
> *other. If somebody's off sick, we cover it between ourselves*
> *(PD.N3).*

This implies the need for a sound mechanism to ensure that they complement each other, given their embedded advantages and disadvantages. On these grounds, one of the informants shared her opinion about the importance of managing such interactions through structure.

> *We had to have a lead, we set up a structure for returning the points there, so every time a new disease register comes on, we have that sort of that pyramid structure, of knowing who we can go to, who we can ask questions of, and having meetings to set it up (PB.A1).*

In addition to the formal mechanisms, informants underlined that their interactions were managed more by norms. They asserted the critical role of the norms and values held in the practice to support information sharing, as well as knowledge dispersion process. This issue will be discussed in-depth in the next chapter

8.2.5. SIZE AND FORMALISATION

Based on the assumption that large-size practice organisations tend to possess organisational resources that enable them to perform better than their small-size counterparts *(See Page 44 and 88).* Informants confirmed that they had some advantages of being large practices, including more staff, more expertise and the ability to offer a wide range of services. Thus, it was interesting to explore the imperative of size in organisational structure. More importantly, it was necessary to investigate how the practices dealt with managing resources given their large-size.

Responding to the question on how practices governed and formalised people's behaviour, there were two main focuses. The first related to day-to-day clinical activities, and the second related to managing relationship amongst individuals in the practices.

For clinical-related activities and behaviour, informants confirmed that they were 'regulated' through the organisation's policies and procedures. This was intended to maintain a standard level in delivering services.

> *Because I have policies and procedures, that are written out for me, I can't step over those boundaries, so I know what my guidance is and where I can work within (PA.HCA1).*

Amongst the four practices, Practice C put more emphasis on the importance of policies and procedures in assisting the practice to share knowledge. This was crucial considering their previous merger activities.

> *It's been difficult for the practices coming together and getting the two teams working together. The merger has really helped us to share good practice that both practices might have had, putting in policies and procedures that benefit all of us (PC.A1).*

Although the merger itself was done in 2006, the two practices had only worked together under one roof since November 2009, so that it became vital for them to ensure that people from different sites learnt and shared information. Putting policies and procedures in place was expected to help the process of transferring knowledge and good practices. To strengthen such efforts, the existence of formal documents, such as job descriptions was said to help the process of learning expected behaviour.

> *All the staff are managed, have their job descriptions and know what they're doing and are trained, all the systems and procedures are in place, so that the day to day management of the practise works smoothly (PC.A1).*

> *[...] it's very family, we're all part of a big team and we all like to work together and learn from each other. We do have clear policies, procedures and expectations (PC.N1).*

For all practices, aspects embedded in the structure such as job descriptions, provided members of organisations with information on how they should do their work and deliver care (PC.A1; PB.D3). This kind of knowledge was preserved in the structure and was accessible for everyone and could be used repeatedly.

> *People know their responsibilities from their job description and from their day to day meetings, we have regular meeting, team leader meetings, practice meetings, partner meetings, so it's very clear I think, people know, people definitely here know what their job is (PD.D3).*

In managing the relationships amongst individuals, practices emphasised the importance of widely shared norms and values in governing them. People shared a similar understanding that they worked as teams, and enhanced by the fact that they had been working together for a relatively long time. Hence, although there were no clear rules directing how they had to work as teams and share information, people held on to the values and reflected them back through their behaviour.

We understand these things, because we work together for all the times, and not because it is written down in such a corporate message (PA.D3).

So, even though we're big and we're professional, we're still all approachable, whereas in a small practice you've got maybe just like two GPs and maybe one practice nurse. They probably get quite close and work together. I don't see that as a negative point with being a big practice because there's so many of us around all supporting each other (PB.N1).

Thus, instead of depending solely on rules and procedure-based formalisation, practices also relied on the strength of shared values and norms. However, considering the size of the practices and their future development, it was deemed to be necessary for rules and procedures to exist.

Well, there is, we work as a team, there is almost a sense of family. [...] I think we do, we are, interpersonal cohesion. Commitment, morale, we do try and keep although it's quite hard sometimes, but I'll go into the order, rules, regulations. there's bits of both isn't there? We have to have a bit of that to achieve that I think. You have to have some of the regulations [...]. Bit of the hierarchy because, otherwise as a huge, we're a big practice and we just wouldn't be able to do it if we didn't have a little bit of that (PB.A2).

8.2.6. DECISION MAKING MECHANISM

With regard to how decisions in the practice were made, all informants answered that it depended on what kind of decision that had to be made. All practices confirmed that there were two general types of decisions, strategic or business and day-to-day decisions.

All informants mentioned that business level decisions were made in partnership meetings, which were usually attended only by partners and practice managers. Examples of strategic or business level decision included improvement of the premises, taking a new partnership, engaging in a new medical contract and deciding to recruit additional staff. Most decisions were made through discussions, and less on voting mechanism. For all practices, each partner had equal right for voting regardless their part-time or full-time work status.

> *For strategic and planning purposes, that's very much the partners getting together to see and sitting down and it's done as a discussion to come to a conclusion. We don't take votes as such. So that's the prime decision-making process (PC.D4).*

Most informants confirmed that the decision making process was not easy and was time-consuming, particularly important decisions. An example was given by Practice B, related to the process it went through for deciding the practice's participation in the *new* GMS contract. A very thorough assessment on the potential implications of the contract and the resources needed to implement it became major considerations for the practices.

> *The first thing was for the partners to analyse the documentation before the contracts were signed. We spent a lot of time meeting and poring through the documentation, to compare it to the existing contract and considering the implications. We then had further days when it was agreed to implement it to decide how we go about the organisational sharing out of tasks, and how the business should be organised to meet those new tasks. Simple decisions were made, such as investing more staff time and training into the audit function, because, whilst QOF is good clinical care, we recognised that the measurement of performance, and proof of that performance was going to be imperative to meet the higher standard of targets and also to prove that we were worth the money (PB.A4).*

Rather differently, Practice D tended to take its strategic or business level decisions by means of a democratic vote between partners, to come out in a majority decision. However, for some predefined areas, depicted in partnership agreement, decision making was still conducted through discussion until they reached a unanimous decision.

> *Democratic vote with the partners. To decide on something different within the practice we all have a vote and we go on a majority decision, unless it's a specific area which is written into the partnership agreement that it has to be a unanimous decision (PD.D1).*

In terms of the frequency of meetings, each practice reported different procedures in holding partnership meetings. Practice B held its meeting once a month, while Practice A had its partnership or doctors meeting fortnightly.

For day-to-day decision, the process was generally conducted at lower managerial level meetings and involved different levels of employees and professions. However, given the urgency nature of the situation and the necessity to act immediately, some decisions were not taken through meetings. For Practice A, if there was an immediate issue which needed to be dealt with, the staff directly contacted one of the partners to consult and make decision.

> *In this practice, everyone gets very well actually. And if there are any issues, then they're dealt with very quickly. All the GP partners are very approachable, so [...]if there is any problem and needs immediate decision. You know, I'll go the lead GPs. After all the places that I worked, this is one of the practices where it has a very strong work ethics where everyone is pulling on the right direction (PA.D2).*

While in Practice B, the decisions were made in teams, in which they discussed their issues and proposed solutions to their team leaders who passed the information to the partnership. For some minor decisions, approval from the practice manager was sufficient, without having to consult the partners. The same process was followed by Practice C:

> *For day-to-day things, most of those are made between the practice manager and the lead GP for that area, or the practice manager herself if it's a more minor thing. Then there are lots of day-to-day decisions that get made all the time of course. Individual people have got areas of responsibility that they can decide on (PC.D3).*

In Practice D, business level decisions and day-to-day decisions were said to be overlap at some points.

> *There's quite a lot of overlap probably in the meetings, so we might make decisions in the partners meeting and then fell down through the management meeting and some more day to day work about running the practice wouldn't come to the partners might be dealt with management meeting (PD.D2).*

When some decisions from the lower level meetings needed to have approval from the partnership, they were brought to the partnership meeting to be finalised. This was confirmed by all practices, and one senior partner gave an example.

So, if there is a decision that we need a new health care assistant for example, there'll be a process which will involve one of the partners, the practice manager, the nurse team leader, and they will have a decision about whether we need to have another nurse. If that decision is approved then it goes to the practice meeting for a final decision. That is approved, so all the important decision making goes through the practice meetings, goes through the partners essentially (PB.D1).

Despite different arrangements in the decision making process, all informants agreed that all decisions should reflect the interests of the practice. More importantly, decisions had to be aligned with the partnership policy.

Once a decision was taken, it obliged every member of staff in the practices to follow it, regardless of any disagreements that may previously have emerged during the process. To eliminate such disagreements, informants emphasised to involving people whom were potentially affected by the decisions and to increasing the awareness of what was happening in the practice. The participation of staff in the decision making process was vital, as they knew their job-related matters. The involvement itself was perceived to bring transparency to the decision making mechanism and contributed to a thorough understanding of things happening in the practices.

In terms of decisions that are made and including people, I think we are quite good, I wouldn't say great, but quite good at involving people and letting people know what's happening and what's going on (PD.A3).

We work in teamwork, so each decision is an involvement. Decision is what people perceive, it is not what I tell them. It is how I act, it is how a senior receptionist act, how's a practice nurse act, how the doctors act […] (PA.A2).

The involvement mechanisms were argued to improve the quality of the decision making processes, especially in large practices. One of the partner informants asserted that no one could make a decision solely on their own, and thus, the involvement of others was important.

We've got a large number of partners in this practice, much larger than most other practices, so you've got to have quite a dynamic form of decision making process, otherwise you could

end up having different camps and different opinions. Now I think obviously practices employ people who are like themselves, but we are quite fortunate in this practice that we can reach decisions even through a large number of people quite quickly. We do that really by involving everybody, you know for a major appointment that we employ somebody, we discuss it with everybody, make sure everybody has an input into it. Really we're quite good at making decisions quite quickly. We go round the room and see what everybody's opinion is and involve that opinion in the decision (PB.D2).

Specific to clinical-related decisions in nursing teams, all practices reported similar mechanisms. Nurse informants reported that they were given a certain degree of autonomy for making relevant decisions appropriate to their profession. One nurse in Practice C shared her opinion.

We make decisions ourselves, we assess the patients' progress and if there are any problems we go to Specialist Practice Nurse or the doctor. Otherwise, with our experience we can make decisions about how to forward the treatment ourselves. With the new treatment plans, if we were worried about how someone was progressing, for example if a wound wasn't healing, then we would refer them to that specialist area, if it was out of our expertise (PC.N2).

In general, for the nursing team, when the decisions related to non-clinical, administrative and management issues, they discussed it with either office managers or practice managers. For clinical matters, the processes were conducted within the nursing teams. In addition, for issues that raised needed further concerns, they were brought to practice meeting, or probably to partnership meetings for approval or consultation.

8.2.7.   POWER DYNAMICS

The interviews identified two streams of relationships in the discussion about power dynamics. The first one was related to the relationship between the practices and the Primary Care Trust (PCT) and the second one was power dynamics within the practices. Both were considered important to give a complete picture of the power dynamics in the practice organisations.

On the relationship between the practices and the PCT, informants understood that the PCTs had a strategic and political position, as they were the only bodies through which the Government distributed funding for primary care organisations. Accordingly, informants were aware of how PCTs controlled the practices.

> *They have (PCT) purchaser power and can take a stance about things that forces us to take action - largely through money (PB.A4).*

> *All the power rests with the PCT, because they're the government representatives in the area. They have all the stack of duties, they have complete control of the income that moving around, so the power rests absolutely with them (PA.D1).*

Most informants asserted that the discussion about their relationship with the PCT was an integral part of the relationship between the PCT and the Government. At one point, the PCTs held power over practices, but they only did what the Government asked them. The performance of the PCTs was also assessed by the government, which made PCTs come under pressures. PCTs needed to show that they had performed well in delivering government policies, which in turn, urged them to ensure that practices achieved their target goals. PCTs relied very much on government orders in their programmes.

> *If it wasn't the government 'must-do', then the PCT wouldn't bother. If it is not something that they wish being judged, even if it is good for clinical practice, and it is very sensible around here you aren't got to do it (PA.D1).*

> *If they want something like world class Commissioning Group, then our leverage is to use opportunities like that. They wanted System One delivering, it will save the NHS a lot of money, so we used the delivery of System One as an opportunity to leverage things that we wanted from the PCT (PB.A4).*

To deal with their corresponding PCTs, GP practices set up a Practices Commissioning Group, which acted as lobbying body to support primary care practices in dealing with PCTs. All practices under study were under the same PCT, which was one of the largest PCTs in England. Practices A and B contributed to the establishment of the GP Commissioning Group. The GP Commission Group gathered opinions from practices and used the input as a basis

to deal with the PCT. The Commissioning Group stood for the interest of practices and to ensure a relatively fair relationship with the PCT.

> *If we can mobilise all GPs to take a combined similar stance. If you pick the right subject, you can make the PCT change. But you have to pick the subject which is one that they're being judged on that they must do. So, every year the government sets the PCTs various targets that they have to hit (PA.D1).*
>
> *But there is a practice-based commissioning group, they represent all the GPs in [X] that is negotiating with the PCT, with some successes organising new services...to try to improve services and also to make us more efficient (PA.D4).*
>
> *There are particular difficulties in this PCT. So, [...] the last three or four years have been very fraught as a result of that. But we've worked very well with them, Practice-Patient Commissioning Group is very strong here (PB. D3).*

Informants reported that PCTs influenced the practices through different mechanisms. The first mechanism was through providing suggestions to practices; the second was by forcing practices to act on some activities; and the third was through approval mechanisms on certain organisational issues.

Several informants mentioned that the PCT often gave suggestions on what the practice should do. These suggestions were seen to be dictating to the practices, which in turn, led to the second mechanism which was to force practices to implement certain things or take certain actions.

> *The PCT now dictates what we do, where the money goes, what they want for their enhanced services etc. They hold the purse-strings, really. They dictate to a greater extent what we do. But it doesn't make for a great relationship and I don't, they annoy me no end. If you go back, 5 or 6 years ago, I felt we had a reasonable working relationship with the powers that be, then. I think that's disappeared. It's not personal any more (PC.D5).*

Informants stated that sometimes this caused disagreements or conflict between the practice and the PCT. These conflicts of interests occurred because they each had different points of views on certain matters. One of the senior partners in Practice B attributed that to the PCT's financial issues.

> *I've always tried to understand the PCT problems that they have, so we have a lot of professional disagreements, but the*

PCT or a similar body are necessary. There's always been a potential conflict of philosophies between Primary Care GPs and PCTs, they have the money to balance, we have the patients to see, so it's this compromise between the two. Our desire is to give good patient care and not to worry about the finances and their desire to have a budget to control (PB.D3).

Similar responses were given by partner informants from all four practices. They realised the difficult money situation faced by the PCT. It caused the PCT to emphasise cutting budgets more than programme implementation. One informant stated that the PCT was categorised financially as the second worst in the country and had experienced underfunding for the last 3-4 years.

There are particular difficulties in this PCT, as you probably know they're in debt. So, the last 3 or 4 years have been very fraught as a result of that. But we've worked very well with them (PB.D3).

A partner in Practice C added that because of having a large area to cover, while at the same time only serving a relatively small population, the PCT had to face high costs.

It is one of the biggest counties in England but has a relatively small population, so providing services to a small population in a big area will cost more than if everyone was all together in a metropolis like London, because everything's compact, you can cover things easier. So, there are all sorts of arguments about funding per patient (PC.D1).

The PCT was also argued to influence some practices' decisions. Although the relationship was claimed to be distant, practices needed to obtain PCT approval on some matters. From the practices' perspective, this was a one-way negotiation and brought little for them.

The government and the PCT, how would it gain us anything as a practice, how would it allow us to change the system in which we work, because effectively we work in this enormous monolithic structure of the NHS, controlled effectively at the whim of the ministers, the politicians. Our contract is an Act of Parliament, if we choose to break it; effectively we could break the law. If the Government decide that they want to change it, they just pass another ACT of Parliament and they change it. We can't have a meaningful two way negotiation. So, within

those constraints, it doesn't really matter two hoots our vision is (PA.D1).

This put practices in difficult situations, especially when they needed to implement decisions immediately.

> *[…] as a practice sometimes it's very difficult to get a decision out of the PCT. So, for instance, if we want to develop a service, an additional service it takes a lot of meetings, a lot of correspondence, before the PCT finally come around. So, it may take a year, 18 months, far too long to get a decision about something. So I suppose at times it makes it difficult. […] There are things we disagree about but they have to do their job and we have to do ours. But the decision making process can be very slow sometimes (PB.D4).*

Informants also reported that in some cases, the PCT was not supportive of the practice. An example was given that the way PCT dealt with the practices was sometimes contradictory to how it handled patients, which in turn, brought inconvenient situations for the practices.

> *They're not very supportive. Recently they asked us not to prescribe certain things, so we don't and then patients write to them asking for the drugs and they agree. So, they not very supportive of us implementing their decisions (PC.D2).*

> *The PCT in [X] do not have a lot of money, they are quite tight with money, ok, compared with some areas like […] they have more money, ok. And they are always aiming to save money. Sometimes the PCT you feel they manage things in a way which is not good, but they would argue because they do not have enough money. So, it is money which is the main driver (PB.D1).*

This created a negative perception of the existence of PCT for the practices. One of GP partners claimed that the existence of the PCT added nothing of value, and that it would have been better to take the PCT away from health care system (PD.D1).

Regarding the power dynamics within the practice, informants asserted that their structures only reflected formal arrangements in the way that individuals and

functions related to each other. However, power embedded in such relationships could be different or less formal.

At the partnership level, each partner had equal power from one to another, which gave each of them equivalent footing in the decision making process. Hence, each had comparable rights to engage and influence actively in the decision making process, regardless of their status of being part-time or full-time practitioners.

> *[...] we all work as partners. So, no one is boss and you all have to get on. We all have financial investments in the practice and take a profit out of it. So, we have to be able to work together and also have to be happy functioning in the place (PA.D1).*

The list of part-time and full-time statuses is presented in Table 22. Each session is averagely 5 hours. Full time is based on 9 sessions working in practice, which takes a total of 45 hours/week. Less than 9 sessions is considered to be part time. However, as noted by RCGP, the measurement of Full Time Equivalent had become more difficult under the *new* GMS contract. *'The BMA stated it would be difficult to calculate FTE figures after the introduction of the General Medical Services (GMS) contract in April 2004, as the contractual arrangements which permitted FTE to be estimated no longer exist.'* (RCGP, 2006).

Table 22. List of Partnership Status

No	ID	Gender	Partnership Status	Fulltime/Part-time
1.	PA.D1	Male	Senior Partner	Full Time
2.	PA.D3	Male	Senior Partner	Full Time
3.	PA.D4	Male	Partner GP	Full Time
4.	PB.D1	Male	Senior Partner	Full Time
5.	PB.D2	Male	Partner GP	Full Time
6.	PB.D3	Male	Senior Partner	Full Time
7.	PB.D4	Male	Partner GP	Full Time
8.	PC.D1	Male	Partner GP	Full Time
9.	PC.D2	Female	Partner GP	Part Time
10.	PC.D3	Female	Partner GP	Part Time
11.	PC.D4	Male	Partner GP	Full Time
12.	PC.D5	Female	Senior Partner	Part Time
13.	PC.D6	Female	Partner GP	Part Time
14.	PD.D1	Female	Partner GP	Part Time
15.	PD.D2	Female	Partner GP	Part Time

Salaried GPs employed by the practices did not have the same rights as the partners. Their involvement in strategic decision making was different as were

their responsibilities towards the practices. This represented the power difference between employee and employer.

> *I haven't got the responsibilities the same as the partners have got. They are very competent to sort out their areas (PA.D2).*

All doctors reported that their day-to-day working relationships were not affected by the differences of being employees and employers. Partners were perceived to be very approachable. However, such differences were noticeable in terms of profit distribution.

> *I just wanted to make sure, that I wasn't going to be abused by taking on too many clinical responsibilities, without getting any necessary payment for that or "power" , power opportunities of being partners, being involved in management decisions. If they were to be continued like that for five ten years, not offering a partnership and just hire more and more salaried or retainers, then It would be a bit more power difference (PA.D5).*

Meanwhile, on the relationship between partners and other teams, such as nurses and administration staff, all informants agreed that it was only a representation of formal power. This also related to the status of being employees and employers. Being employers, the partners had the power to require members of their practice to answer and report to the partners. Yet, it was argued not to disturb how they worked as teams.

> *I mean as a partner you're employing the other members of staff so you are the employer in one respect. But from our day to day work it goes very smoothly, so you don't ever need to go down or think really like that. You come to work and everyone's very professional and they know their role and their job, and they do it themselves and we do it ourselves (PB.D2).*

With regard to power differences derived from previous medical qualifications and training, it did not become a concern in the relationship between physicians and nurses. When working in teams, such differences did not make doctors more powerful than the nurses. It was a matter of different skills and teamwork was about pulling all the skills together. In this case, physicians would not have been able to do what nurses do, and vice versa.

In my opinion, the partners should be the people that are responsible and leading by example, and other members of the team are responsible to the partners. They should be over-seeing their work. We don't really have a hierarchy as such. My belief is that we work in teams. Teams with specialist interests, specialist groups, I couldn't do the nurses' job they couldn't do my job. That doesn't make me above them, doesn't make them above me. It's just different areas, different skills, but it does need somebody at the top pulling it all together, which is the partners and the practice manager (PD.D1).

Within the healthcare professional teams, there were differences in how power was pictured in the practices. Practice A had a nursing team comprising three practice nurses and one senior HCA. The nursing team in practice B included the head of the nursing team, three senior practice nurses, three practice nurses and four HCAs. As for practice C, after the amalgamation, it had five practice nurses and three HCAs. For practice D, its nursing team comprised four practice nurses, two HCAs and one phlebotomist. Partners perceived that nursing teams were different in a way that the relationships amongst nurses were relatively hierarchical. This was confirmed by nursing teams from Practices A, B, and C. While they worked as cohesive teams; in terms of reporting, they needed to report to the heads of nursing teams. They were required to consult the head nurses whenever an issue emerged. However, apart from this formal power, no other representation of power differences reported to exist.

Different from the other three practices, Practice D did not have a head nurse on the nursing team. All four nurses were on same qualification grade and worked part-time in the practice. Each nurse had a different responsibility, but they worked as a team.

We don't have one nurse in charge overall, so we all have our areas of responsibilities that the practice wanted us to take on a role, so that helps us look after certain things. So, one nurse might look at all the protocols, one nurse looks at holidays and sickness and staffing levels, and different things like that. But I think we all work as a team. Sometimes it's difficult because there's not one person in charge, but sometimes it works well because we all take on our own responsibilities and deal with them. I think we've got a good working relationship (PD.N1).

As for administration teams, good working relationships were reported in all practices. There were no frictions or conflicts caused by power differences. Similar to the nursing team, all administrative staff agreed that if such difference existed, it mainly stemmed from the formal power attached to the status of partnerships. In addition, they also mentioned that years of experiences and qualification possessed by individual professionals also became a source of formal power.

> *All the team leaders are listened to because we have the experience of what we're supposed to do. So he's (practice manager) created us if you like, so if he's not going to listen to us, then we might not as well be here. We inform him what's going on, we discuss things. I think everybody, there's a lot of, it's shared a lot, but it's specific to what you do. I have no power in other departments if you like, other than, if something major goes wrong then if I'm the only manager here I deal with it, but no it's shared. I think if something goes wrong, then you've got the senior people will take over if you like, and try and sort it out, but generally, we all have power, we're all empowered to do whatever is necessary (PB.A2).*

Finally, a general remark about power was made by a senior partner from Practice A, suggesting that some people probably had an unconstructive senses of power and reflected this back to their relationships. Yet, the relationships in the practice were less formal. People did their jobs as parts of their roles, instead of being influenced by others.

> *Our relationships are more informal than that, and in general, we're not influenced by someone else's power, we're influenced by feeling that we want to do the right things for the practice and for the patients. We're not working to please someone who has more power, and the staff aren't doing something. They wouldn't otherwise they have chosen to do because we have power over them. But they do because it is part of their job, and they understand that it's their role to do certain things (PA.D3).*

8.3. PERCEIVED CHANGES IN ORGANISATIONAL STRUCTURE

Most informants in the four practices stated that changes in structure aimed to be a modification for a better implementation of QOF. These structural changes were as the follows:

8.3.1. EXPANDING STRUCTURES: NEW POSTS

As stated earlier, practices shifted to give more priority to chronic diseases. To accommodate this change, practices reported to adjust their structures. Informants acknowledged that new posts were created through nominating team leaders, for both clinical and administrative teams.

> *What it does on the clinical side, from my point of view, we have divided the tasks of each of the QOFs into leaderships [...]so, the clinical GPs are responsible for particular areas, let's say mental health, we've got GP for mental health. We've got GP for hypertension, and heart failure (PA.A2).*

> *Now we have various leads [...] partner leads for various diseases and we've got the team leaders, and then we've got the deputy team leaders (PB.A1).*

The assignment of clinical leads and team leaders were aimed to ensure that practices worked efficiently. As referred to by several informants, efficiency meant that people did their jobs according to their roles and qualifications. Although it seemed to be reactive, the decision of assigning managers was critical if the practice wanted to obtain a high score.

> *I think we've refined very well is allocating responsibility to the right people. So, as I said, health care assistants, nurses, employed doctors all carry aspects of responsibility for performance delivery [...] so rather them, than a partner GP doing it. Or maybe rather them than a GP if they're a nurse or a health care assistant. So efficiency is the way to do it (PB.A4).*

On the other hand, while this was important for QOF implementation, it means additional responsibility for partners apart from their clinical duties (PB.D1; PD.D1).

And the other thing we did is that we had a series of meetings about what we were going to do about QOF, so each everybody in the practice was kind of allocated a QOF, an area of QOF, a responsibility, and that person was then made accountable for the performance of that area of QOF (PB.D1).

Informants also pointed out that these adjustments were meant to assist in channelling reports or dealing with QOF-related issues faced by staff; hence, they assisted practices in achieving QOF targets. In practice C, however, while such arrangements formalised structures, the activities involved were not novel for the practices. The practice had already appointed clinical leaders prior to QOF, and QOF was just perceived to make it more formalised.

We always had a clinical [...] hats on, leads on things. Probably QOF formalised it a little bit (PC.D6).

As well as clinical posts, new non-clinical posts were also established, including IT support system and data quality management. This became critical, as QOF emphasised the accuracy of data in supporting evidence of care activities. Practice A for example, decided to employ a data manager and modified its existing department, which formerly dealt with the patient data base into a data management division. This division worked to support coding and data management so that clinicians were able to focus on clinical care without inconveniently dealing with how to update or change template arrangements in the system. Indeed, all practices reported that they had assigned data specialist to work on this. In Practice B and Practice C, one of the partners was responsible for the running of IT system. The assignment was based on the competence possessed by the particular partners as well as their interests.

[...] so we brought in another member of admin staff who worked closely with me, looking at the IT and trying to get everyone working together to set up the IT so we could look at and monitor the QOF, to get consistency over the whole organisation (PC.D1).

While all four practices had similar responses to IT, their adoption of IT systems was different from one to another. Practice C, for example, admitted it was a late adopter of the system. At the time of the interview, the practice had just finished

installing the System One, the new IT system. Informants acknowledged that the practice was the slowest mover to adopt the system. Several adjustments were put in place to ensure that the transition from the old to the new system was smooth. This involved training staff to make them ready to run the system.

However, the new posts arrangements were said to make the structure of the practices more formalised than before. In Practice B for example, even though there had been a structure prior to QOF, it had been implemented very loosely. After QOF, it became clearer who reported to whom.

> *Definitely it is more organised. As well as the structure and having leads for specific disease registers, so especially my department, the department I'm in which is audit and data, we know who to send our queries to, which GP is responsible for each disease register and we can ask queries of them. When a new disease register comes online into QOF, which this year was the CVD register, we had to nominate a lead, and we had to set up a structure for that. Sexual health was set up last year for 08/09, and again we had to have a lead, we set up a structure for returning the points there, so every time a new disease register comes on, we have that pyramid structure really, of knowing who we can go to, who we can ask questions of, and having meetings to set it up really (PB.A1).*

The formalised structure was also seen to give the practices more sense of focus. At the same time, such structures were perceived as having a drawback as they potentially led to inflexibility. Formalised structure was seen to cause rigidity in coordinating activities.

> *It's made it more structured. But that's not always a good thing. Because it's good to have flexibility within the service as well. Yes, it's given us something to focus on, a point of achievement when you get there, team-working, but rigidly (PD.D1).*

In Practices B and D, most informants perceived that such changes were not only caused by QOF, as practices also experienced significant changes in partner composition that were said to have had a significant effect on how organisations were structured.

8.3.2. EXPANDING THE STRUCTURE: RECRUITING ADDITIONAL STAFF

Another change in the structure of all four practices was recruitments of additional staff. In clinical areas, partners mentioned that practices had decided to recruit more staff to cope with the additional QOF-related workload. Those additional staff included physicians, nurses, health care assistants and phlebotomists.

> *Things are obviously improved, we have a bigger nursing team now than we used to. We have to employ more nurses. we have more appointments now, that's better, that's the improvement (PA.N1).*

The practices also pointed out that recruiting nurses and HCAs was considered to be the most notable decision for them. As the increasing workload urged the practices to think more about allocating tasks efficiently, recruiting HCAs was perceived to be more cost-efficient than hiring more nurses or salaried doctors.

> *We didn't have health care assistants. We had the same structure apart from HCAs. We started them to try and relieve some of the burden off the nurses, so the nurses can take more of the chronic disease management, but now we've got to develop that a bit more as well. Because a lot of the chronic disease management is still being done by GPs (PC.D3).*

> *So, when we look through it to the future, and we wonder about whether we're going to employ new doctors, we also think that instead we're going to employ any nurse, or healthcare assistants. Because we obviously got to balance income against […] who can do the works, and who would be the most cost effective (PA.D4).*

Informants in Practice C also mentioned that the number of nurses was twice that of previously. However, this had resulted from the amalgamation of practices rather than QOF. Consequently, such a merger also instigated a larger number of patients to deal with.

The practices also recognised that additional administration staff were needed, because of QOF, to incorporate sending invitation letters to chronic disease patients to visit the practices for regular healthcare checks.

We have recruited more people, the teams have increased, and people are more specific in what they do [...]. We have specific teams now that deal with specific things, rather than it being general (PB.A2).

As with regard to the admin staff, we have to sort of cooperating more admin staff to help sending out the reminding letters, and all the different admin sides of it. And from my point of view, there's always just been more works since that and slightly under pressure to achieve it (PA.A1).

In addition, all practices also confirmed recruiting of data processing supports. Even if it was not only related to QOF, the existence of a data processing unit was considered necessary to keep up with the increasing number of patients registered in the practices.

While the expansion of teams was considered beneficial for QOF target achievement, it was also perceived to have slight drawbacks.

Well it has because when they became team leaders and team managers, that certainly changed the structures and changed who was doing what and who was where, and for those people personally, they had their own issues and own agendas, so they all had to manage their own little teams, suddenly there was more of a name to a team, and it was 'them' and 'us', and even there's 'the people in area A' and 'the people in area B' and yet we're all the team (PB.N2).

8.4. PERCEIVED CHANGES IN JOB RESPONSIBILITIES

Most informants agreed that QOF brought changes to their job responsibilities. However, they emphasised that QOF altered job processes instead of job content as follows:

8.4.1. RELIANCE ON COMPUTER-BASED TEMPLATES

One of the senior partners in Practice A asserted that the main impact of QOF could be seen in how it altered the processes of service delivery. A significant example of this was the use of templates and protocols to help clinicians, nurses in particular, ensure comprehensive clinical data collection.

> *We have little pop-up in our screen that reminds us that this patient needs this and this for QOF. So, there's always something that to remind the staff that something need doing for QOF (PA.HCA1).*

> *We've got screen messages on the computer to say when this patient comes in, a pop-up says 'this patient needs this doing', or we put messages on prescriptions when people ask for repeat prescriptions to say 'please make an appointment with the doctor or nurse because you need this, this or that' (PD.N2).*

QOF pushed practices to reach quality targets, which determined the amount of financial reward received by the practices. Thus, practices needed to ensure that their staff were working in accordance with procedures, templates and protocols as required by QOF.

> *They want to reach the targets so they get the financial rewards. We have staff who help monitor and run searches and look at how we're doing. It's looking at the targets and making sure that the work we do, that we fill in templates, so that we reach the targets that we need to do to get the payment. That's where I say our work's structured like that, because most things we do it's all set out on a computer for us, so we don't miss anything, don't suddenly remember that we should have been asking this to all our patients that we've been seeing (PD.N1).*

QOF assessed a practice's achievements through evidence presented in data form, so that practices needed to invest in a robust information system. In this sense,

QOF ensured the use of a computer-based system of data entry. This was not only essential for QOF-related reports and activities, but was also helpful as a convenient medium to share information with other healthcare professionals. In turn, this was considered to help practices in eliminating information gaps between one professional and another, especially when they needed to deal with similar cases, as well as to keep up to date with clinically important information.

> *QOF is a learning resource, specially for new doctors, like me for example, I am always learning and I am always obeying. I might not know the rough guidelines for when a patient for example, needs to be having a blood test, I do know the answer. I mean, if there is a little box in your computer, saying things like QOF point 4.2 needs doing, and you say oh yeah yeah I forgot about that or I didn't know any disease is happen […] so, it kinds of actually be good in some ways, because for learning[…]what those guidelines are[…]but you shouldn't miss those all guidelines to be guide guided (PA.D5).*

> *I think QOF improved our performance in many ways, yes, I'm better at preventative medicine, definitely. Because I get guidelines and things and it helps me, you know, it's the benchmark really, the benchmark of good medicine (PB.D3).*

> *We are now a lot more education orientated, up-to-date with clinical protocols, guidelines etc, to cascade them down to the rest of us, more focused on protocols work really (PD.D1).*

In contrast, using protocols and templates along with obtaining QOF data had been reported to affect patient care negatively. Some doctor stated that focusing on the protocols and templates was time consuming and might divert their attention away from the patient.

> *I have to spend lots and lots of time, asking patients questions which are not to do with patients care. So, it affects my patients care, it gets in the way of me caring patients. I have to take time out of practice, to looking through pages of statistics, trying to analyze what QOF statistic means. Which means that I have less time to looking after people (PA.D3).*

> *I think you have to spend time collecting the information that as a good clinician you would be collecting any way if relevant. And unfortunately the QOF is a lot about gathering the data and then it's nothing to do with that data really, or how that*

influences the care of the individual patient, so you will spend less time with the patient (PD.D2).

8.4.2. INCREASE A SENSE OF RESPONSIBILITY TOWARD JOBS

All informants asserted that they were aware of the financial consequences of QOF for their practice. For that reason, people became more attentive of their job responsibilities than before. More importantly, they were more conscious of how their colleagues did theirs. Informants mentioned that they felt more attached to the job, as well as more responsible for their practice's performance than prior QOF period.

In fact, QOF was perceived as a positive development, as people became very aware of the collective organisational effort to achieve the QOF targets. At this point, QOF was perceived as providing clear expectations or measurements for performance, which were used to check whether healthcare professionals had accomplished their tasks. The side effect, however, was more pressure of work. Informants became more aware of the targets and the impacts on their practice, so that they tried very hard not to fail the practice.

> *I don't want to be the one who keeps missing reminding people and reminding patients of certain things that need to be done. I don't want to be the doctor who doesn't capture whether they are smoker or not. I don't. Anyway, if they are overdue the smears, I want to write in or remind her to cervical smear. Yes, I want to be that one. But I don't want to be the one who missing off capturing information that is needed for QOF (PA.D2).*

> *Everybody in the practice was kind of allocated an area of QOF. That person was made accountable for the performance of that area. So, if you didn't do what you should be doing, then the senior partners, or the manager would say 'why aren't you doing this, this is your role, you've got to get on with it' so there was kind of a greater degree of accountability and pressure (PB.D1).*

Informants also reported that there was an increase in the sense of belonging, so that people were willing to work harder. It created strong ties amongst people and groups as results of working closely with each other.

I think that can be quite helpful, that doctors, and receptionist, and audits staff and everybody works [...] they have more of an understanding about where the practice is going, and it increases their level of responsibility and you get trust between kind of people as well. I think as an organisation, it was probably good for us, it wasn't negative (PB.D1).

Being responsible for a specific task meant that the informants felt they were contributing significantly to their practice job cycle. It also implied that the pressure was spread over everyone as part of the team work. To some extent, taking the responsibility personally also meant that people needed to make sure that things were going well in other parts of the system, as that might affect their work as well.

Because you want to work as a team, you want to feel that you have got the cohesiveness, but at the same time, you are trying to be competitive. So, therefore, it might cause you to have to do things, to ask questions, which actually you do not want to do, and you wouldn't have done it if it hadn't been for QOF. Because of QOF, you know you've got to say to somebody that it was incorrect, or we must do this correctly or something like that. So it makes you a bit of battle actually at times (PA.A1).

8.4.3. CHANGES IN WORKING PATTERNS

In order to accommodate QOF, most practices under study made some adjustments to their opening hours. This spread the workload to make it more manageable. It also provided more access for patients, so that the appointments were able to fit in with the time they were most available.

We have extended hours now, we open Wednesday nights, that's part of it as well, and Saturday mornings. We have more understanding, I think all the staff have a better understanding of patient care (PB.A2).

Along with making an adjustment to the opening days and times, some practices also adjusted their allocated consultation time. Practice B for example, extended its consultation time from 10 minutes to 12 minutes. This was believed to help clinicians cope with the administrative work of QOF such as capturing patient data on the computers.

We couldn't accommodate QOF in our standing, in our working day without actually making an allowance for it within the consultations. So, we extended the appointment length by 2 minutes; that's what we decided to do (PB.D1).

However, a different pattern was reported in Practices C. Although physicians experienced patient consultations taking a longer time to finish than before; the practice did not extend their consultation time slot. Instead, it was decided to delegate some of the routine work to lower level health professionals, such as nurses and healthcare assistants. A similar pattern was reported in Practice D. In other words, the practices started spreading the workload amongst other healthcare professionals to free up the GPs to see more patients; more detail about work delegation will be presented in next section.

Well, we are a bigger team than we were in 2002 or 3 [2003]. There are more people. So, I suppose we accomplish them by increasing the number of people to do the job. We accomplish them by making people focus on their own skills, their own strengths. So, the nurses for instance, don't do very much of the routine checking blood pressures, taking blood samples, checking urine samples, because that can be done by the health care assistants. Who don't need the same amount of training. Similarly the routine checking of patients' coronary heart disease indicators is mostly done by the nurses, because you don't need a doctors training to do those things. So those are the structural changes we've made to try and address QOF (PC.D4).

I think because the GPs have got more work, because of QOF the GPs have had more work for themselves to do, so they've now passed a lot of the routine chronic disease management on to us (PD.N2).

In addition, it was reported that health care professionals, both clinicians and administrative staff, spent more time outside their official working hours working on QOF related tasks. Although this was not clearly stated as a practice's policy, it showed that people took on the responsibility of supporting the practice in conducting change (PD.D1; PA.D4).

Even the staff you'll find that are in way over hours that they should be, just doing work that you just wouldn't expect normal employed staff to do, almost as if it was their business (PD.D1).

8.4.4. DELEGATION OF TASKS TO LOWER LEVEL HEALTH CARE PROFESSIONALS

All physicians reported that they had additional QOF related administrative responsibilities. This caused them to deal with patients' problems during consultation time and to do administrative work, including updating patients' data, simultaneously. To cope with these responsibilities, most informants agreed that it was only by working harder that they could balance both the clinical and administrative sides of their jobs.

> *Surgeries have got longer, patient demand has got, so that even individual consultations have got longer as well, to try and cover all the different areas, during the, we don't get all the, we still only have a 10 minute appointment but I tend to run pretty late now, which I didn't used to do in the past. But we try to feed some of that work through to our practice nurses as well, so I think some of the practice nurses have noticed a bigger increase in their workload. They were doing it before but looking after asthmatics and the diabetics, sort of routine work and then if there's a problem feeding back to the partners. So, clinical work, there's more involvement with the nurses. Likewise with the nurses we've employed health care assistants to try and make help with their workload as well (PC.D3).*

This development also extended consultation time, as stated in the previous section. Sometimes, people needed to work out of their clinical hours as they chose not to do the administrative work during the patient consultations. However, the drawback was a possibility of missing key or crucial information.

> *It is more work, more time. And in the practice, certainly more time, we spend time, sometimes, out of our non-clinical hours, going through the QOF stuff and checking which patients have not met the criteria, going through those patients (PA.D4).*

> *There's a lot more things that are target driven, things where probably have 20 minutes to do our work, we fought hard to get longer appointments to do our work, because it's not just ticking boxes, and if we're not careful we're going to lose something important. Patients come in and they expect […] its patient's expectations I think, we have to answer those expectations (PD.N3).*

The increase in workload pushed clinicians to delegate some of their routines work. Nurses reported that they were now responsible for some clinical routine

work that was used to be performed by doctors. This delegation was seen to enable physicians to deal appropriately with major illnesses, while allowing nurses to deal with minor illnesses.

> *We looked to see how much of the QOF we would cover, without making any changes, because quite a lot of QOF is simply data collection and a lot of the patients we were seeing regularly anyway. But the conclusion was that if we wanted to score above 90% we would have to change the nurses' role and bring in extra staff in the back room to tick all the boxes (PC.D4).*

As nurses engaged in the delegated works, they also reported delegating some of basic nursing work, such as measuring blood pressures, ECGs and wound dressing to health care assistants and/or phlebotomists.

For the practice management, the issue of delegation became an important consideration in staff recruitment. As stated early in Chapter 8 Section 8.3.2., partners asserted that recruiting health care assistants was more favourable than hiring more nurses or salaried GPs, as it was cost-effective and enabled the practices to allocate work more efficiently.

> *The nurses have taken on more chronic disease management, more advanced things. Health care assistants have taken over from them. Freed them up by doing the easier things, the blood taking, the more routine services (PC.A1).*

Apart from the idea that delegation of work would enable healthcare professionals to deal with the workload better, such a decision was also claimed to be a form of appreciation of clinicians' qualifications and experience. It was deemed unnecessary to train doctors, for example, to do routine checking on Coronary Heart Disease indicators.

> *I think our restructure of nursing team was directly in relation to QOF. We wanted to make sure that the G-grade nurses were doing as they should be. We'd never had health care support workers or phlebotomists in this practice before. It had always been done by our G-grade nurses. When we started pushing a lot of the chronic disease work that the GPs had previously been doing across to the nurses, we needed to free up their time from the more menial tasks by getting appropriate bands in place*

and passing it down through the structure to the phlebotomists and health care support workers (PD.D1).

While the delegation decision seemed to be inevitable, practices still ensured that work was delegated to competent individuals. Partner GPs asserted that delegation of work did not take place unless nurses were ready and competent to perform clinical work. Sending staff to acquire more advance skills ensured that lower level healthcare professionals were able to deliver a high quality of care; hence, maintain patient satisfaction with the services, as well as representing the practices' strength in managing clinical governance.

> *We'd never let nurses in this practice do something that they are unqualified to do. The clinical governance, we're very strong on clinical governance and you know we have a very strong training and mentoring process here, so until people are fully trained and capable, we don't let them on their own (PB.D3).*

Staff development programmes were mostly reported by nurses and health care assistants (PA.HCA1; PC.N2; PC.A1). Besides sending staff on external training, Practice D reported that the partnership also provided internal training sessions for them. This was beneficial in sharing knowledge about practice-related contexts.

> *I've done diploma level courses for the chronic diseases that I deal with and in-house training from the GPs as well, we've had things like that (PD.N1).*

An interesting point was raised by the informants in practice B. It was widely understood that upgrading skills was critical to ensure that healthcare professionals were up-to-date with the latest knowledge in the field. Moreover, the practice management believed that such investment contributed to building the practice's competence, as well as to preparing staff for career development. It also improved the level of loyalty, which then, reduced the possibility of staff turnover. In this way, it helped to confine practice's valuable knowledge and sustain it within the practice.

> *We invest in them, we invest in their career, so they've got a career structure to feed into and improve, they have targeted pay rises, so if somebody's doing particularly well, takes in a new role, new responsibilities, they get a greater pay rise. We have a career structure within in each grade, so they have[...]*

the team leaders in charge of different sections of the organisation, so they've got a promotion structure as well. And another thing I think is increased number of holiday days they have a year, as they've been more senior in the organisation (PB.D2).

We have very good loyalty to the practice, we do not have a big turnover of people within the practice, so we would feel that because of [...] a mutual respect and trust and shared goals within the practice (PB.D1).

8.4.5. EXPANSION OF ROLES AND SKILL MIXING

One of the positive impacts of task delegation to lower level healthcare professionals was an expansion of roles. From the perspective of the nurses, their roles were expanded and this development was considered to be accelerated after QOF was initiated.

I think my role's changed a lot since I came to work here. I felt that when I came at the beginning it was much more doing dressings and treatment room work. As time moved on I've had to do courses so that I can see the patients for reviews. So, that I've done an asthma course, I've done a diabetes course, I've done a COPD course to enable me to be able to do the reviews effectively. So, I think that's changed I think my role's increased from what it was when I came to work here (PD.N1).

As well as the expansion of roles, nurses and HCAs reported that they had experienced skill mixing in a way that they were expected to be able to establish a variety of skills needed to perform clinical task. From the partners' perspective, skill mixing also emerged as an indirect consequence of QOF. To ensure that all the required activities were attended to, practices required nurses and HCAs to participate in medical courses and training programmes.

Because if we knew something was coming like we need to do more with diabetes, then we need more nurses to be trained to do the diabetes, which is what happened. Or minor injuries was suddenly part of another service, so we needed nurses to train, trained as minor injury, so you know, I know that's slightly separate from QOF, but they're all little areas that feed in and why the minor surgery and the insulin starts, you know lots of things that were secondary care became involved in the primary care, you know, in coronary heart disease, I went to train to do

that, more diploma level, you know so that's the impact, and of course while you're away, somebody needs to be here (PB.N2).

At this point, most nurses and HCAs reported that they were pleased with their expanding roles. They asserted that the training provided for them to enhance their competence helped them in performing their jobs better.

[...] I enjoy my position and my grade and the responsibility that I have. As I say, there'll be a lot more training to come in the future so I know I can progress (PB.N1).

I've done smoking cessation course to do the smoking, and the injection course to do flu injections, and pneumonia injections and also to give vitamin B12 injections. So, I have been on courses, and it has been helpful within my job (PA.HCA1).

QOF has changed a bit the way we work within the practice because we have specifically trained nurses to do some specific QOF assessments, looking after patients with chronic respiratory illnesses. Doctors wouldn't have had the capacity to do that, so our nurses do that. It has meant that we have moved some of the work that the nurses have done down to health care assistants. Routine blood samples for instance, which the nurses used to do a lot of, now it's devolved to the health care assistants level, which has freed up nursing time to do some of the routing call and re-call of patients (PC.D4).

The partners recognised that the nurses and HCAs were happy and more confident with their new expanded roles and responsibilities. For the partners more delegation of work meant more income for the practice.

I think they... a lot of them are enjoying their new role and find it rewarded and their experienced therefore, it's a more rewarded role. in this practice we've had chat to take off a lot of activities they used to do and give them to health care support workers, therefore freeing up time for them to do chronic disease management, for example. So, we would hope that although their work has changed their workload may not have changed much (PD.D2).

I think because of the increased work load and more responsibility, I think I have more confidence than I did have. But other than that, I don't think my personality has changed at all (PD.N2).

I feel more confident than before, I feel that I'm doing a good job (PD.HCA1).

Moreover, with their updated competence, nurses felt that they contributed by filling out the skill gaps in clinical care.

> *You're looking at what clinical skills you've got, aren't you, so I had a lot of skills , so you look where the gaps and so you fill the gaps if you can, and that's what I was saying, you can't always fill the gaps because practice nurses tend to be older. It isn't something that newer, younger people come into. Although they are nowadays because nursing's changed as well, so it's become more recognised as being important. So, you look at the gaps and fill it. And you looking at how much money is in the box, what kind of staff you can get and what they can bring in it. I'm enthusiastic, and I'm also happy to do lots of things (PB.N2).*

On the question of whether this led to extra work and increased the workload for those professionals, one partner argued that nurses did not really engage in any extra works. The nurses' expanded roles were still conducted during duty hours so that it should not be counted as 'extra work'.

> *They're not really doing any extra work because they're just working their contracted hours. But instead of doing dressings they're doing other things and a lot of them seem to enjoy it more (PC.D2).*

On the question how the delegation of work and expansion of roles potentially affected patients, one senior partner in Practice C stated that the main aim of this adjustments or changes was to improve services for patients. Although there was no any formal assessment of the impact of clinical delegation, patients were probably enthusiastic about being met by nurses during a consultation.

> *Because then you'll have a nice good half hour appointment, where the patients get more feedback rather than trying to squash it into a ten minute doctors appointment, where we're just rushing through everything, and don't really have the time to you know give the patient the background on say extra dietary advice or exercise advice you know all the other little bits and pieces which are good for the patient (PC.D3).*

8.4.6.   MORE FORMALISED AND ORGANISED WORK

In comparing before and after QOF, some informants reported experiencing more formalised and organised work.

> *So, we have to make sure that every year, that organisation is care to maximise income through the QOF, and that means that we need to make sure that we got the nursing staff and health care assistant staff organised in order to make sure we see patients who have relevant illnesses or sometimes rather than things like smoking (PA.D4).*

> *Probably more organized really, it's a bit more organised, things get done a little bit quicker than what did it when I first started (PD.N3).*

Along with the QOF, informants also pointed out that this might be attributed to changes in personnel in their practice. In Practice D, for example, the appointment of a practice manager was said to make work arrangements became more formalised.

> *But then we've the practice manager, I can't remember how long she's been here now, 5 years, she's made a massive difference to the practice. Completely re-organising a lot of things, making sure that it runs effectively, putting things in place that were never put in before. Because it was probably more of a family orientated, before where people just came to work and floated, and did what they needed to do. Whereas now, it still is, because we've still got the same staff, but there's a lot more order come into it as well (PD.N4).*

8.5. CHANGES IN DECISION MAKING

With regard to the decision making process, informants claimed that QOF did not seem to significantly influence or alter the process. It did not change the mechanisms which the practices had undergone. However, as QOF contributed to the formation of new structural positions, such as clinical team leaders, it signified the involvement of clinical team leaders in the decision making process.

The decision making process started by pulling together various inputs from professionals within teams. Team leaders usually led such processes and facilitated teams to take the relevant decisions on particular issues. As Practice D

was the only one amongst the four practices that did not have team leaders in its structure, final clinical decisions were taken to one of the partners.

> *Well, if there is any GP lead for that clinical area who decides with input from the nursing staff how the area is going to be dealt with. It is obvious from QOF what information is needed. Once a system has been decided, then everyone is expected to follow that system to make sure the information is captured (PA.D2).*

In all decisions, the practices noticed that QOF had become a central factor to take into consideration. It guided the practices to think about funding and how to use it in the practice's favour.

> *The new contract made people think about money more and the best way of using that money. Looking at the provision and how we can move work around the practice, so we've got the right people to do the right jobs and the people were properly trained. But that would have come anyway. The decision making has not changed. The doctors and practice manager meet and we put forward the figures and we discuss how the future of the practice is going to look (PC.A1).*

Informants reported that with the implementation of QOF, practices had tried to involve staff members in decision making and provide clear guidance for them. It was a part of the practices' support to ensure that the change process triggered by QOF took place in at all organisational levels. Regular reviews and meetings were conducted regularly to provide clear objectives.

> *Support, clear objective [...] understanding and making sure that there is review [...] for example, nurse team meeting, every two weeks. I have a nurse meeting where we discuss things, for example QOF changes, right? (PA.A2).*

All four practices reported that being very active in ensuring that everyone was involved in the change process. Informants pointed out that practices engaged in intensive communication to make people understand why change was needed and what they were required to do.

> *We're a very forward-thinking practice and I think the management want to that rubs off on everybody, because we know if there's any change, because management know what's coming. If they tell us, they can say to us, 'Right, well this might*

*be coming up,' and they know that we'll support them because
we want the practice to progress, we want the whole, we want
our teams to progress (PB.N1).*

In addition to QOF, informants in Practices B and C pointed out that change of key personnel, including practice managers and partners, also contributed to changes in decision making mechanisms. In practice B, the practice manager, who was also a partner, had similar rights to GP partners in the decision making process.

*It hasn't changed because of QOF, it has changed in the last 6
years, because people are more accountable and these kinds of
structures are more overt. Before QOF and maybe before the
new practice manager, it was kind of more nebulous. People
knew what they were doing, but there wasn't really quite the
same structure in place to make everybody accountable for what
they were supposed to be doing, but it wasn't really QOF, the
new practice manager changed that (PB.D1).*

*There's more involvement of the practice manager. We've had
to have that since 2004 because there's just so much more
paperwork and everything coming in. We'd never cope with it
(PC.D3).*

8.6. PERCEIVED CHANGES IN POWER DYNAMICS

8.6.1. PERCEIVED CHANGES IN THE RELATIONSHIP BETWEEN PRACTICES AND THE PCTs

In discussing external dynamics, informants emphasised the practice's relationship with its external systems, such as the PCT and the Department of Health (DoH). QOF was perceived to bring significant change to the practice's position towards those two bodies.

With the implementation of QOF, the PCT was positively perceived by most administration staff to be fairly supportive.

*If you've got any query, you got a lot of contact numbers to ring,
there's support for the IT side of things, and well, partly data
quality meetings, which is to do with QOF and then
coordinating things to do with QOF. What's PCT organised? I
mean they do have certain meetings and things that they*

organised depending on certain things and what is happening, such as Swine flu last year (PD.A2).

Interestingly, from the viewpoint of partners and managers, QOF made them more disempowered than before. Although it was perceived to bring a positive clinical impact to patients, QOF was considered as interference in clinical care by the DoH through the PCT. Practices were bound to have their performance assessed by those bodies if they needed to have fresh funding.

> *I think most of the practices feel to be disempowered by the QOF. We felt particularly that the Department of Health or whoever is setting the QOF targets is interfering with our clinical care. So, power is being removed from us (PA.D3).*

> *No, I think it's (power of practice) been diminished. The PCT now dictate what we do, where the money goes, what they want for their enhanced services etc (PC.D5).*

The disempowerment was represented by control over several administration and clinical aspects. These included finance, evidence-based assessment, and the interference of the PCT into some medical decisions related to a patient's treatment.

1. **More control over the finances.** Informants perceived that there was a growing control over the practices' finances compared to the period before QOF. An example for the arrangement was enhanced services. The *new* GMS contract binds practices to providing essential services for their patients. In addition, they can also negotiate with their PCTs to offer services other than the essential ones. Such enhanced services are categorised into three key types, which are: (1) Directed Enhanced Services, (2) National Enhanced Services and (3) Local Enhanced Services. Directed Enhanced Services are obligatory for all PCTs but the participation of practices is not obligatory (i.e. child immunisation). National Enhanced Services depend on the PCT's decision to serve local needs. While it is not obligatory for PCTs to participate, if they choose to do so, they need to comply with national standard and prices (i.e. minor injury treatment). As for Local Enhanced Services, it is fully under the control of PCTs as they have 'freedom to design, negotiate and

commission any other services' that are needed in their areas. In designing this service, the PCT may also use national standards or negotiate prices locally (NAO, 2008).

Practices might provide enhanced services for their patients, however, whether they were able to obtain financial incentives for these services depended on the PCTs' decision. If PCTs chose not to provide the services, then practices would not be able to get access to any money.

> *So, the so-called enhanced services, they can choose not to provide a locally enhanced service, in which case, we don't have access to the money for it. They can choose not to put money into Practice-based commissioning, which they've done largely locally. So they've certainly got more power than they used to have (PC.D4).*

2. **More Control through Evidence and Inspections.** Informants agreed that QOF was an evidence-based mechanism to assess a practice's health care service performance. This also increased practices' awareness of the need to provide robust evidence, as they were subject to fraud checking. Based on the submitted evidence, PCTs conducted the process of appraisal and visits to inspect practices. In addition, practices were also visited by a PCT fraud squad to check whether there were cases of rule breaching. To some extent, this was perceived to undermine the clinical professionalism of the clinicians.

These processes gained unenthusiastic interest from practices. Informants stated that the PCT disbelieved them and acted with suspicion that practices had cheated to obtain extra money.

> *They didn't think we could do it, but then we did it, but actually we do and we can. So, that information has been given to the PCT, which then scrutinized it, and then they send someone around to appraise, and pick up the clinical things that we want to look at and they question you about why you do this, how to do that, how did you do that, and what's happen there. We also get every few years inspected by a fraud squad, which is a second visit to see where we're cheating because the government thinks we do. They think we don't run well because the exception code for all patients. If you have to process them,*

if you don't produce the data, you got penalised, unless you put of what we call an exception code (PA.D1).

With all of the procedures and documentation required, QOF was thought to be bureaucratic and tended to put document availability as a priority rather than health care services.

3. **Less referral possibilities for patients.** Interestingly, most informants were aware that the PCT were experiencing a difficult financial situation.

    We have the PCT that has one of the highest debts in the country. There are various reasons for that. One of the reasons is that one of the hospitals has been employing a lot more and more consultants and taking a lot of money. They are not being able to control the hospital output, but another reason is that we are paid less in this area, because we have a higher index of deprivation. It is a different index, we are supposed to have a more healthy population, than somewhere like [X]. So, we are paid less per patient. So the PCT is wanting to reclaim money as much as possible, so we're always to look ahead, trying to negotiate more money and things if they've paid us for things that we've done. So, it's a bit of struggle (PA.D4).

    They pointed out that this situation resulted in less referral possibilities for patients, which brought potential detrimental effects on the practice.

    One example is we can't refer anyone, or we couldn't, up until about a month ago, for IVF, but if you register with that medical practice which belongs to other PCT, two miles down the road, you can be referred for IVF. Now a patient can register with either practice, that kind of inequity within the system, just because of the PCT you're aligned to is frustrating in the very least, and you know, does leave a very bitter taste, particularly for GPs who are kind of having to deal with that really. So, I think in that sense, relationships can be quite strained, because there's that divide between the GPs trying and want to do the best for their patients and the PCTs trying to manage a budget of [X] which is hideously overspent (PD.A3).

    Practice D claimed to be mostly affected by this situation. Being located at the boundary of the PCT's coverage area, its location position was side by side with a different PCT area. In most referral cases, they had to refer to the closer hospital, which was under a different PCT, rather than its own PCT.

It's often been quite difficult because we're working over boundaries, which we don't really feel the PCT always recognises and helps us with, and it's basically a problem for patients and a problem for us, and the people who set these areas up don't seem to recognise the problems you have if you're out on the boundaries, so that causes frustrations (PD.A3).

This situation caused pressures and frustrations as the practices' intentions to provide better health care services were strained by such situation. For Practice D, it was perceived to get worse when things were commissioned and put in place without any discussion with the practice. The partners felt that they were overlooked as a practice.

We're a small patch of a huge area, and it's sometimes difficult to get your voice heard I think, when you're trying to put changes and proposals in place. We have different systems to other larger areas and commissioning groups. We feel we get overlooked quite often which is a high level of frustration. Things get commissioned and put in place over our heads without any discussion with us as to whether it's actually what we want, so we're forever fighting and trying to say just run it by us first maybe we can suggest something different, maybe we don't need that. Just because they need it in such-and-such an area doesn't mean we need it in this area. So frustrations I think probably is the biggest thing to pick up on (PD.D1).

Sharing similar perceptions, Practice B tried to increase the practice's bargaining power with the PCT through working as consortium. While it was understood that the power position was unlikely to improve for the practice, the consortium helped the practice to voice its need in a collective manner.

[…] they certainly control the purse strings more than they used to. I find it hard to answer... I think... the PCT is no longer local. So, it's changed because the PCT is now regional, and with 20,000 patients we were 10% of the city, so you had much more leverage with the PCT then, whereas now, we're 20,000 patients out of a county that's the size of Belgium, we have much less leverage with them, which is why we work as a consortium, in terms of more or less power, I don't think it's changed (PB.A4).

While this dynamics affected the practices, informants tried to understand the reasons underlying such changes; for example, the PCT was seen to act on the

Government's orders and it also faced a pressurised situation following and implementing orders. Informants also emphasised that the PCT had gone through major restructuring that made it a regional-coverage body that was bigger in size than before. The change in size was also argued to make it more hierarchical, which affected the level at which the practices interacted with the PCT. It affected a practice's access to contact the PCT, especially when they needed advice on certain issues. This was perceived to weaken the relationship between the PCT and individual practices. Informants felt that it was easier to communicate with the PCT prior to restructuring.

> *[...]it became the 'vast bureaucratic beast that it is, feeding reports and targets to the government' it was a very different relationship, basically coming in and saying, you know 'we need to save money, can you cut your prescribing, can you cut your referrals' and things. And I think it's carried on like that for a while. In terms of how it is at the moment, there has been a change of personnel in the PCT which again, you lose expertise and contacts which is hideously frustrating if you're here trying to solve a problem and you don't know who to contact and nobody at the PCT knows what's happening (PD.A3).*

8.6.2. PERCEIVED CHANGES OF POWER DYNAMICS WITHIN THE PRACTICES

Within the practices, informants did not notice any significant impact of QOF on power dynamics amongst healthcare professionals. For part-time partners, QOF did not affect their power equality. They might have had different shares of QOF money, but it was fairly distributed based on the hours they worked as part-time. Moreover, their status in the practice as part-time GP partners did not make them different in the decision making process as they still had equal voting with the full-time GP partners.

> *It is all pro-rata, so if you are a full time partner, generally, you have twice as much as the work of a part-time worker, depending on exact time or number of sessions, but you still have equal decision, so I don't have twice as much power because I work twice as much as time, I've still got the same amount of authority. But they might have as much as twice clinical QOF points to look up, but then rightly get twice as*

> *much money as I have been doing twice as much of the work (PA.D5).*

The relationship between partners and salaried GPs was considered to be the same, pre and post QOF. However, there were some mixed responses to the question on whether QOF might have caused changes in the relationship between the physicians and the nursing team. This was mainly due to the delegation of some clinical works from physicians to nurses.

From the practice management's perspective, QOF was perceived to be just a trigger for the changes in job responsibilities, which led to a different way of managing the nursing team from what practices used to do previously.

> *For us it was QOF that triggered it; for other practices, they may well have already had their G-grades having more power than we do here. Historically we haven't managed our nurses as well as we should do. We had a lot of the G-grades not doing G-grade work which means that they're not having to take on the roles and responsibilities appropriate to their grade. Whereas now it's a lot more focused that the workload that they are doing is appropriate to their grade so they take on the associated responsibilities with it as well (PD.D1).*

It was interesting to find out that the practice managers tried to use QOF indicators as a means to manage the clinicians in their practice, in particular the GPs, and this might give them power over the GPs as well.

> *As a practice manager I certainly learned more about the clinical and the data quality compared to before. Beforehand probably it would have been more around the items of service which was like form filling in, counting and things like that. Practice managers would have been very focused on [...] income but it was just in a different way. When QOF came in we had to learn more about the clinical issues, like for the targets and how they worked out and what nurses needed to do. What training was needed and where the funding was going to come from for that training. There was a lot more around getting the clinical aspect of it all in place, rather than just saying that form's been signed and getting a set of signed forms, bundling them off. We looked at how we could track and keep ahead of the game really as regards getting people in for their annual reviews and things like that (PC.A1).*

QOF actually gives me a road into clinical management, whether that's appropriate or not, but you know previously I would have nothing to go to them really to say 'oh, you should be doing this in a consultation', they'd have been 'don't be ridiculous you've not got a medical degree' [...] whereas now I can say 'ok, QOF indicator is this, you're not doing it, that means this practice will lose £2000', it suddenly gives you a tool and they go 'oh, ok', [...] it has given me that platform to challenge them for the clinical side of things, and for the management side of things, they know a lot of thousands of pounds are determined in the management indicators, by what I do as well, so yes, I do think it has (PD. A3).

Most partners did not recognise that there was a change in the relationships in their practice. Interestingly, they were aware of various studies mentioning that there was disappointment among nurses regarding their QOF assignments, especially related to the incentives that they should have received. Whilst, some agreed that changes in the power dynamics probably had taken place, there was no significant evidence of that. Partners only pointed out that the delegation of work had expanded the role of the nurses, rather than giving them more power over other teams in a working relationship setting.

Whilst the nurses recognised that there was significant delegation of clinical work from GPs, they did not object to it. Indeed, they asserted that such delegation did not result in a shift in power dynamics. They reported to respects the GPs decisions to delegate some of the work. The delegation of work was perceived as something that had to be done to ensure effective running of the practice.

Certainly, I've got respect for the GPs. They're my employers and they pay me so I've got to say that! But yes, of course I've respect for them. The same way I hope they've got respect for what I do for them, and for the girls down in the office as well. I think if you don't have that respect and don't realise what everybody does, a team can't be run effectively really (PD.N4).

Taking all cognisance, informants perceived that QOF did not cause a significant shift in the power dynamics inside the practices. People maintained good working relationships in spite of the significant increase in workload. The delegation of work expanded the roles of nurses in clinical care, but it did not seem to give them

more power in the practices. People realised that they had different roles and thus contributed differently to the achievement of the practices' objectives.

8.7. THE NARRATIVE OF 'NO CHANGE' IN STRUCTURE

Finally, while there were visible adjustments to various aspects in the practices, informants still maintained stories of 'no change' in their structural arrangement or designs.

> *Well, it's a small difference, you know, but part of it is obviously we have a team that, you know, spend more time watching QOF, so that takes that team away from other things. But we still have a, you know, we still have the same structure; there's no difference in the structure. QOF happens and we deal with it' (PB.D3).*

> *2004 marked obviously the beginning of the QOF. It marked the end of our contractual obligation to provide out of hours, so most GPs have withdrawn from that although I've carried on and so have 2 or 3 of the others. The QOF was another set of hurdles to jump over. Financially more important than the ones that went before it. But apart from a bit of extra employment and some re-deploying of, or re-appraisal of staff roles, I don't think there's been any major structural changes in the practice to accommodate QOF (PD.N1).*

8.8. CONCLUSION

Although there were some considerable differences in their size, all four practices claimed to have a structure with a limited number of hierarchical layers. It was asserted that the relationships between the layers as well as between different professions were relatively flexible and open. The partnership, which in the case of Practice B included the practice manager, was described as a 'bubble of equal partnership' and was positioned on top of the managerial structure. The managerial layers acted as the infrastructure that supported the partnership.

The relationship between people in the structure was complex, reflecting both vertical and horizontal interactions. It enabled those on top of the structure to engage in shop floor issues. Thus, it would have been very difficult to draw an organogram for the structure. Job responsibilities were assigned mostly based on qualification, expertise, and skill. For clinical jobs, people's interest was the main concern in setting specialisations. In the decision making process, all four practices confirmed that in general there were two different levels of decisions, one was at the business level and the other was day-to-day decision making. More importantly, it was revealed that the channel of reporting was similar to decision making, in the sense that clinical issues were separated from administrative issues.

The most debatable change caused by QOF was about the delegation of work to lower level health care professionals. Nurses and health care assistants had been prepared to take more complex responsibilities, which were thought to be appropriate for their levels of qualification. Interestingly, most nurses reported that they were happy with the new assignments, and they felt that it did not give them more power to deal with others, especially with physicians.

The findings also showed that the decision making processes were still similar to those in place prior to QOF. The only difference was that QOF now became a reference for making decisions. Considering the contribution of QOF money to practice income which was about 20-30% of total income, practices had shifted their priorities and used QOF as a critical reference to justify their decisions.

Related to the relationship between the practices and external bodies, such as the PCT and Department of Health, findings showed QOF brought more power to the PCT, and thus, disempowered the practices financially. To some extent, it drove practices to be oriented toward the fulfilment of QOF targets rather than focusing on patient care. Target driven behaviour was also perceived to undermine the clinicians' professionalism.

Internally, the findings reported no significant difference in power between people. Members of all four practices still had good working relationships and there was no friction among teams. Instead of seeing delegation as a power exercised by one profession or one hierarchy to another, it was seen as an unavoidable effect of QOF. In all cases, people perceived that there was an embedded power in their structural position and everyone seemed to respect the power of the partnerships and enjoy their work accordingly.

CHAPTER 9

IDENTITY AND NORMS

9.1. INTRODUCTION

This chapter provides the findings on how individuals perceived identity of the organisation where they were working and their role as either health care professionals or administration staff. The previous chapters showed that changes in both strategy and structure were evidenced in all practices. While practice identity and norms were less visible, understanding changes in both aspects provides a complete picture of how QOF potentially altered the framework of practice organisations. The findings are presented based on the common themes which emerged during the interviews.

9.2. ORGANISATIONAL NORMS AND VALUES

Informants highlighted important points about the importance of organisational norms in running the practices. They argued that they had strong organisational norms that were perceived to affect how they dealt with patients, to influence their day-to-day informal interaction and also to govern their working behaviour.

9.2.1. PATIENT-ORIENTATED NORMS

In dealing with patients, all informants involved in the study confirmed that they shared similar norms which emphasised the importance of patient-centred care. These norms guided them during their interaction with patients, who were seen as the focal point of healthcare.

> *So, we're seeing patients, we have to do the problems that they are bringing in, rather than what we want to get out of them in a way, the process and the information in order to make it work (PA.D1).*

It's patient-centred care all the time ultimately. We want to give the best service we can within the budget and within our capabilities really. So, it's always patient-centred care and I've not come across anybody who says anything otherwise. And that's how I feel. It's patient-centred (PC.D3).

This value was widely shared by all professionals in the four practices, both clinical and administrative staff. They confirmed that quality of care was their priority.

Patients are paramount; patients are the first port of call, are our priority. We have to try and give our patients the care and the quality of, that they need, right from reception, right through to clinicians, and when we take enquiries on the phone. We try our best to meet the patient's needs. If we can't do it, we pass it over to a clinician. Patients are our bread and butter, that's what we're here for (PB.A1).

We aim to offer the best health-care service that we can provide with the patients, in mind of their needs as well, and expectations (PD.D1).

In addition, to support their staff in delivering services, all practices emphasised that it was a part of their organisational norms to ensure that staff were given the opportunity to learn. The practices supported both clinicians and administrators by sending them on training courses, as well as encouraging them to learn through their own experiences.

We try and reward our staff and we try and look after them, we try and make sure that through Investors in People, if they want to kind of progress, if they want to go on and do other things, then we will pay for training courses for them to go off and 'professionally develop'. And that is very key to the organisation. If a person comes in as a receptionist, but then wants to go on to do something else, we will say 'yes, if that fits with the practice, then we'll pay for you to go on that course, you acquire those skills' and then they'll say well that's really good, I want to go off and do something else now' and as long as it fits with the aims of the organisation, we will try and help to do that. So, some people will come in, they will do a number of years with us, and then they will go on to do bigger things, better things, which is good. For the salaried staff, we have 5 salaried staff, one is going to leave, he's been a salaried staff for 5 years and he's gone on to be a partner in [X], just been offered a partnership last week, he has been very good for us, he has

worked very hard, but we have also helped him to develop so he's in a position to be able to say to people I'm very good, I want to be a partner' so it works both ways (PB.D1).

Practice A and Practice B claimed that they had a very supportive 'blame-free' norm. Instead of blaming individuals for making mistakes, practices approached it differently, through reviewing and improving the supporting systems to eliminate potential future mistakes.

It is blame-free, but we have systems in place, which enable like significant events. So, it's praised, as well as various areas that need improving. So, it's a question of review, review the systems, review the procedures, and then review the staff, and then appraisal of people, which is very important. The people, procedures, but that is teamwork, that has to work in total harmony. Has to work in harmony, because if there is no support and no movement of change, then you are static and you get left behind. So that is the culture of improving if it needs to be done (PA.A2).

The value is, is a sort of that(professionalism and trying to treat each other with respect, and listening to other peoples' opinions), the members of our work force are our strongest asset and what we try and do is try and promote those people and help those people in order to provide the best service we can. Because it's very much a team based organisation, very much a people orientated organisation, that's why we've got things like 'blame-free' culture 'cause what we're trying to do is [...] trying to invest in the people who work here, to try and make them as good as we can, in order to provide the best service to the patients that we can (PB.D2).

Practice B also had formal values understood as 'Professionalism, Unity and Balance'. According to senior partners, these were strongly held values which were claimed to be the anchors for the organisational practices that were brought up in every meeting.

[...] these values can be understood as, to work together to provide a caring quality service for all our patients, so we strive to, within the practice, we strive to work towards professionalism, and also we have to have a balance in our lives, but above all else we have to have unity in the practice. It's very important that we look after each other. So that, that's our, that's the practice philosophy that I try to bring forward (PB.D3).

Interestingly, the values were manifested differently from one person to another. Nurses held these values through *'treating everybody as you would yourself'* (PB.N1), and *' having high standards and high expectations' (PB.N2)*; while most partner informants asserted that such values were evidenced in their commitment to investing in people, openness and sharing, listening to others and respects.

> *It's just the professionalism and trying to treat each other with respect and listening to other people's opinions and trying to take other peoples' thoughts into consideration when you're actioning things (PB.D2).*

Practice C also emphasised the supportive and openness norms. People learnt together through open discussions and meetings. The partners pointed out that this was also represented in how management involved staff in the decision making process.

> *We're a practice that likes to look after the patients, that is providing a friendly service, and we're an open and a learning organisation. In the sense that we have regular meetings, we discuss problems that arise, if something goes wrong, it's talked about, we don't try and cover it up, we try and learn lessons from it (PC.D4).*

Practice D put emphasis on having an efficient manner and not being money-orientated in providing quality healthcare as its organisational norms. For this practice, the norms strongly supported its identity as a community-based practice.

> *We aim to offer the best health-care service that we can provide with the patients in mind of their needs as well, and expectations. We're not just out there to get as much money into the practice as we can. We're not high-flyers in that respect; it's more the cultural, spreading our knowledge as well with the education base as well. Trying to provide general practice good grass roots for the future and work as a team really (PD.D1).*

From these findings, it is apparent that all four practices had similar strong norms of patient-care; yet, each of them had its own characteristics to distinguish it from the other practices.

To ensure that all individuals in the practice shared the same norms, a good communication mechanism was perceived to be beneficial to foster such norms in

215

staff. Informants confirmed that their practices ran an induction process which introduced organisational norms to new members as part of it.

> *You bring somebody in new who has never worked in general practice before, it doesn't matter what department they're in, they'll have an induction, and then they will have a period of weeks or months training, and they may go, have training in house, they may train outside as well, it's usually a bit of both and it's not until they quite... they will also have reviews (PB.A1).*

> *We would look at the programme of work for an induction for a nurse and we would be involved a lot more with that. GPs would probably leave us to sort that out, us and the practice manager. When we've had new nurses we've planned what their work and responsibilities would be together (PD.N1).*

> *And then in terms of the culture of the nurses, they share similar norms and values, but different, and they have been stimulating to our practice norms, and partly by kind of [...] a process of induction and just by working out how we do things, which could be different in every practice (PA.D4).*

Informants also expressed that *Investors in People* helped practices in enhancing organisational norms through people development. The practice manager and one of the partners in practice B stated:

> *We spend a lot of money on training, investing in people (PB.A4).*

> *Yeah, I mean we invest in all our staff, so we have like an investors in skills, Investors in People status. So what we do, with all our workforce, we try and invest in them and move them forward in their career, so they have more to contribute to the company and to the practice (PB.D2).*

Another practice manager added:

> *I think performance has increased because of tools like Investors in People, even QOF, because we have looked at how we're working and moved forward. Looked at training and development of staff, looked at the future of the practice (PC.A1).*

9.2.2. NORMS GUIDING RELATIONSHIPS AMONGST PEOPLE

Norms can be seen to guide relationships between people; it is interesting to note that some informants closely associated the norms with power dynamics. This especially related to how people perceived both formal and informal relationships. While formal relationships between people have been discussed previously *(Chapter 8 – Power Dynamics),* this section presents only the findings related to norms guiding informal relationships within the practices.

As presented previously, more than half of the informants had been working in the practices for more than 10 years. Given the long years of interaction, people noticed that they were close to one another in varying degrees. This was said to help them manage their relationship in the work context and outside the practice . In practice D, for instance, many of its employees originated from the same area. People worked together and became friends outside the context of the workplace. The relationship developed over time and bound them together.

> *We've worked together long enough to know there has to be some give and take so we'd do it for each other. If somebody's off sick, we don't go to the practice manager and say 'can you sort out some cover' we cover it between ourselves. So in effect, we manage ourselves but we're responsible (PD.N3).*

> *Well certainly, there's a very, team work, sense of family that in a way, because it's a close practice and because people have stayed here for quite a long time, people know each other very well. People have gone through a lot of personal stuff with each other (PD.N4).*

This improved their performance in their work, as they learnt and shared experiences/information. The relationship itself, which was developed through years of experience, can be seen as a strength for the practice.

> *We've all had times, we've gone through some really bad times, through illness, each of us, and we're good friends. We keep in touch with each other and we have socialised in the past with each other, and I would say most of our work, we actually get on very well together. Work situation, we run our own clinics, if one of us is behind and the others are working, you pick each other's work up, so you can try and get through (PD.N3).*

Such relationships were not only expressed through the relationship between colleagues within the work setting. Informants also kept with them a history of the relationship which possibly helped them in dealing with patients. For the practices, knowledge embodied in their members provided them with more understanding of the patient health care behaviours and patient status. This in turn, contributed to efficiency in performing medical activities, as clinician and patient were acquainted with each other.

> *And I have seen families and people evolving like that for thirteen year [...] because I know the whole family, we can have a much more productive discussion and we don't bother so much about confidentiality, as I know them and they know me. It is a conversation between friends and people who know each other (PA.D1).*

> *Continuity brings efficiency. If you know somebody and you know their history and their family you know their problems, you're much more likely to be able to deal with them quickly, than if it's a stranger (PB.D4).*

For most informants, the harmony in working together seemed to be very important, especially when they needed to respond to changes. It was further stated that integration between people and procedure must exist and the team needed to work in harmony. It was essential for them to support each other, to ensure that organisations caught up with changes.

> *The people, procedures, but that is teamwork that has to work in total harmony. Has to work in harmony, because if there is no support and no movement of change, then you are static and you get left behind. So that is the culture of improving if it needs to be done, on reflection (PA.A2).*

> *Our norms and values try to be about the common understanding of goals, about delivering a good service, about openness and sharing and not being too hierarchical, whilst needing structure to work. So, as I said anybody really can come to any of us with their problems. [...] we try to be cohesive, involve people, work as a team, be part of a family, we're all doing the same thing, and again tend to be this sort of style, (mentor and facilitator), but also, you know, trying to think, to look after your staff you know. There's a lot of this, particularly loyalty, maybe less tradition, and very much about developing people, training and trying to make - as you know we have a Human Resources person who is very, very good (PB.D4).*

Another strong norm shared within the practices was respect for others. Several informants asserted that they needed to have respects for other healthcare professionals regarding their work. It was said that effective team working would not work without appreciation toward others (PB.D1; PC.D5; PB.N1).while there were no rules regulating such behaviour, people respected the role of others and their knowledge, as they wanted others to respect them in returns. More importantly, informants also argued that the interaction between them expanded their knowledge scope, as they were able to learn from the experiences of others.

> *All the team leaders are listened to because we have the experience of what we're supposed to do. So he's created us if you like, so if he's not going to listen to us, then we might not as well be here. We inform him what's going on, we discuss things. I think everybody, there's a lot of, it's shared a lot, but it's specific to what you do (PB.A2).*
>
> *There's a general respect for everybody in the practice, whether you're a [...] the doctors respect the lowest, it works throughout and I think everybody tries their best to support each other through whatever you get (PB.A2).*

9.2.3. PERCEIVED CHANGES IN ORGANISATIONAL NORMS

Some informants claimed that they had not experienced any changes of norms in their practices, while others noticed that there were relatively evident changes in practice norms. Those arguing that there were no changes associated it with patient-related norms. However, those agreeing that there were some noticeable changes commented that there were various factors contributing to those changes.

9.2.3.1. ENVIRONMENT CHANGE AND SHIFTING OF NORMS

Informants identified a change in practice norms, which especially related to changes in the surrounding community. Another informant also pointed out that the practices needed more staff to cope with the growing demands and expectations of the population. As more new people have been recruited, it has been seen to contribute to shifting practice norms, especially relating to both clinician-patient relationships and doctor-nurse relationships. By comparing 'old-school' GPs and 'new-school' ones, a senior practice nurse asserted that the

relationship between professions, as well as between clinicians and patients, had become less formal. She perceived that the old tradition of addressing clinicians as 'Dr. or Sister' is now old-fashioned.

> *Well, you've probably heard the word [expression] "old-school". There's a lot of "old-school" trained GPs that were all the senior ones that are leaving. A lot of the ones were trained where they weren't called by their name, it was always Doctor, and the same in hospitals with the Sisters, first names were never used and they're all going now and newer doctors where patients call them by their first name, and it's all just a new thing and it's whether that's a good thing, whether professionalism should take a little step back and say, yes you have come to see the doctor, I'm not your friend I'm your doctor and[...]that's just a very small thing but I don't know. There's a lot changed and I'm not sure if it's always good for that (PD.N4).*

9.2.3.2. CHANGES OF STAFF PROFILE AND FORMALISED WORKING RELATIONSHIP

Informants highlighted that it was not only QOF that caused changes in organisational norms. Different staff profiles were argued to significantly alter how practice norms were set up.

Informants in Practice D noticed that the appointment of the current practice manager had brought about significant changes to working relationships. Previously, there had been fewer formalities in the practice, in terms of procedures or regulations relating to routine activities. It changed the norm of 'give and take' between colleagues, to become more formal working relationships.

> *I think because it was a smaller team, we'd less, we'd five GPs, they all got on well together, they always fell out but everybody was a[...] you looked after each other like a family, everybody knew everybody else, the management side wasn't particularly organised, it did the management as to how it was then, there was a lot less work then, the practice manager was somebody who started in the office and worked her way up, we didn't have all the policies written down, there was a great deal of loyalty [...] I think the loyalty has gone a little bit because there's less give and take, it's seems to be coming down 'this is how it needs*

to be' 'this is how we have to have it' 'this is how the directives say', there was always a lot of give and take. If you worked late, it didn't matter, if somebody needed dealing with, something needed doing, you did it, it didn't matter, you took the time back another day, if you didn't have a meal break it didn't matter because when it was quiet you went home, you don't have the quiet times anymore, and you're expected to do a little bit, and so to me, there's no give and take (PD.N3).

9.2.3.3. PRACTICE RESTRUCTURING AND CHANGES IN WORKING NORMS

A rather different narrative was extracted from Practice C. Its informants reported that they had experienced a change in working norms, which was mainly caused by the amalgamation of two practices. The practice manager asserted that it related to how to accommodate the two different working norms of teams from two formerly independent practices. Moreover, differences in staff demographic patterns also became a concern, as the two teams were very different in age range. Indeed, some difficulties did occur but were sorted out, especially with the administrative teams.

> *There were quite a lot of worries about how the two teams would work together, particularly the receptionists. The group from one practice are all in their 60s and had worked together for 25 years, they were best friends as well as colleagues. The reception team from the other practice was younger, but they have worked brilliantly together. The two teams have merged really well. It has been more difficult with the admin teams because they worked differently so they've had more changes to make, regarding all working in one room instead of having an office each, working together, sharing the work more. One in particular is having problems. She used to work for 2 GPs now she works for 8 GPs and she's finding that more difficult. But I think that's normal and we'll work it out (PC.A1).*

Thus, it can be seen from the findings that there were some changes in organisational norms. While there were no significant changes in norms regulating patient-staff relationships, there were considerable shifts of norms in working context and relationships. However, rather than being caused by QOF, the changes were more associated with changes in both the internal and external practices' environment.

9.3. ORGANISATIONAL IDENTITY

This section presents the findings on how individuals perceived the identity of their organisations and their roles as either health care professionals or administrative staff. Informants were asked whether they were aware of their practice's identity. Interestingly, the responses were varied. Some informants argued that identity was not an issue for their practices. One of the partner informants in Practice A commented that the practice should not put itself in a position to be compared with other practices and to compete with them in a competitive market. This was seen as out of the scope of the practice's ethos. He asserted that as a practice, the priority was to focus on patient care.

> *I don't think that's an issue, I don't think we try to position ourselves amongst other practices. We're not the best or the worst, we don't compare ourselves with other practices. No, it just misses the points, it is not part of our organisational ethos, we don't position ourselves among other healthcare organisations, it's not like Tesco, where we're trying to corner some market which Sainsbury doesn't have. We're just trying to do the best for our patients, and patients are the centre of what we are trying to do. Not our position amongst other healthcare organisations around us. We're not looking outward to see what other practices are doing in order to jostle and manoeuvre this practice amongst others (PA.D3).*

Taking a similar stance, the practice A manager mentioned that it would be difficult to see that a particular practice was different from others, as they all worked in the same sector. In fact, she argued that instead of trying to be different, they were all trying to facilitate for each other.

> *We don't like competition [...] we don't, and that's the worst thing that the government has ever thought of [...] creating a competition in an environment that primarily attracts people that actually care how they do the jobs [...] .and it is not QOF, it's how I could go on, and I feel very strongly about people trying to compete. It's absolutely nonsense. That has happened, but government is way out [...] of how is it in reality. We are here to help, I mean, we are here to facilitate, so that the patients can come and see us, and they get good care, and they see us when they need to (PA.A2).*

222

9.3.1. PERCEIVED ORGANISATIONAL IDENTITY

In general, the interviews were able to gather how informants perceived their practice identity. As organisational identity has close associations with organisational images, some informants might have overlapped their descriptions on identity with images. At this point, informants tended to explain their organisational identity by comparing their practice with others. Moreover, some informants also attached several identities to their practice. Thus, the identities are not mutually exclusive to each other.

9.3.1.1. PATIENT-CENTRED PRACTICES

All practices asserted that their priority was to provide high quality care for patients. Patients were seen as their centre of operation, as well as a primary source of practice identity. Hence, having established that being patient-centred was its core orientation; informants described how such an identity was represented in their daily operations. One example was how patients were treated with care. This identity could also be presented through how practices offered various healthcare services to cater for different patients' needs. Informants also claimed that their practice always attempted to fulfil a patient's preference to get a high quality treatment from health care professionals in the practice.

> *They're constantly; I think the partnership are constantly looking for other ways to meet patients' expectations and demands, and to provide a better service (PB.A1).*

> *[...]to provide a high standard of patients care[...] to continue to provide a high standard of patients care [...] that's accessible to our local population and relevant to their health care needs(PD.D2).*

Practice A, for example, asserted that its patient-centred identity was reflected through its cautiousness in delivering care, as well as in managing the practice. Although income was considered to be important, it was argued not to be the thing the practice was oriented towards.

> *We're slightly larger than the average in the UK. In terms of organisational structure, organisational culture, I think we probably still have a little bit higher value [...] places higher*

223

value still on patient care, and expert being the people to deliver that care. And other practices, probably, at least some of them, have a higher value on the income and innovation towards getting a greater income [...] It is not to say that all of us as partners feel that way, but that is the way that we've tended to carry us as a team so far (PA.D4).

9.3.1.2. FORWARD-THINKING AND STAND-AHEAD OF OTHERS

Another leading identity cited by informants in Practices A, B and C was being a forward-thinking or stand-ahead practice. The basic narrative of this identity was based on how each practice always tried to offer something new for better patient care, even if it was not required by the government or previously initiated by other practices.

> *We're a forward-moving organisation, and I think that's how, we're thinking, we're doing the training and things next and the research. Now we have got a nice building we are all on one site so we can share the work and the stresses and there are ways of moving forward. So, I think we'd like to be thought of as a practice that's moving forward really (PC.D6).*

> *I think it's the forward thinking and the moving forward. [...] I do just feel that anything that is new to patient care, is, we do implement, we move forward with it all the time. A lot of things that other practices possibly wouldn't take on board, we do. But we are a bigger practice, we've got a lot of admin staff, I believe other practices are half our size in patient numbers, so of course they haven't got the administration that we've got, so you can't implement. To some extent, they're more selective in what they offer to their patients, where as we offer everything really (PB.A1).*

Most informants maintained that it was important to think out of the box or think beyond what the practice could usually do. This was argued to be one of the ways for practices to keep moving forward. In that sense, the practices always tried to be proactive. Moreover, innovative thinking and entrepreneurial orientation were professed to push organisations to stand ahead of others.

> *I think that practices have had to look outside their little boxes I think, especially here, you can't just become the little [...] just sit there and wait for the patients to come into you, you've got to develop into other thing that provide a much better service. The things we do now, I think like the vasectomies, the carpel*

224

tunnels, the minor surgeries, they save the patients, they come into a familiar environment, they see the doctors they know, they're not having to go to the hospital and I think, as a practice, we've done that pretty well, so, you have to grow, you have to look outside (PB.A2).

In order to sustain this identity, they kept moving forward, all practices invested greatly in developing the skills and capacities of their members through training and courses. This strengthened the idea that people-oriented practices were not only concerned about patients but also about their staff' interests.

I think forward thinking and prepared to do something different, prepared to train doctors, we do a lot of training, prepared to have minor surgeries done in our practice. Also prepared to spend money to make the place better for patients if we can, for our own buildings anyway (PB.A2).

We've had a lot of changes, a lot of upheavals, you know with a change in structure and it sort of [...] it moves everything along a step, so whereas like, I'm sort of a junior practice nurse, it gives me the chance to move up and learn more skills and the whole team moves up and moves along. And ultimately, that benefits the patients as well because there's more qualified staff, more well-trained staff and people who want to move on and want to learn more are getting the roles and the training and doing what they want to do as well. It benefits them and it benefits the practice (PB.N1).

9.3.1.3. GOOD GP PRACTICES

Fifteen people from all four practices identified their practices as a good practice. Interestingly, they pointed out different contributing factors associated with 'good practice'. These factors included the expertise of health care professionals, the high loyalty of staff, high quality standards, hardworking staff and practice efficiency.

One senior partner in Practice B associated 'good practice' with the resources available in the practice. Practice B was a large practice and it had reliable resources, facilities and expertise. This was believed to enable the practice to gain economies of scale, which in turn led to efficiency. Furthermore, as the practice

had a large number of human resources, it also reflected a possible wide range of clinical expertise, compared to those of smaller practices.

> *We're a good GP, with good access. We've re-branded ourselves into the [X] Practice with logos etc. We are also Investors in People, and providing good quality and efficient service to the patients. [...] well because we are big, a big practice, we have a lot, we can have economies of scale in terms of what we do, and because we have a lot of people working for us, it makes us a very strong, robust, resilient organisation, we feel we are better placed perhaps to take advantage of some of the things which are available perhaps than a smaller practice, where they are more[...] they do not have the expertise. They do not have the number of people to actually kind of pick up these new exciting things and drive them like we have done in the past 3 to 5 years (PB.D1).*

Similarly, Practice A was identified by its informants as a good practice on the basis of staff quality. A high quality of healthcare services could not be achieved unless a practice had good quality staff. Moreover, a salaried doctor stated that Practice A had a very good work ethos and staff worked cohesively as teams, which could be used as a sign of good staff quality. She asserted that these aspects showed a sense of belonging to the practice, as well as how they worked seamlessly together.

> *Because the staff are very good, in terms of attitude, how hard they work, and the fact that they got their responsibilities and they want to fulfil those responsibilities, and they do a good job. Everyone working towards the same aim, really. We're not relying on one particular person, everyone especially with receptionists and admin staff, they've all got more than one job to do. So, they might be on a reception desk, but then they have a few hours doing cervical cytology. They've all got their own little individual areas of expertise they want to be in charge of, whatever, that people can ask them about. So, we don't have a group of receptionists, a group of admin staff, a group of nurses or doctors. People are sort of more a mixture round with the admin and the reception staff. [...] So, here, with the receptions having different small area to look after, things are generally smoother. And they got their own little area that they keen to look after and make sure that everybody just does it right. This is more ownership in their area (PA.D2).*

Rather differently, informants from Practice D associated a good practice with how much the practice was concerned with high quality standard of service delivery. This can be seen through how the patients were happy to stay with the practice.

> *Anything I can say about that is that we've got a lot of patients who move out of our area and don't tell us because they don't want to leave us. Because we must be good. We must provide a service that they like (PD.A2).*

9.3.1.4. COOPERATIVE / FRIENDLY PRACTICES

Some informants identified their practices as friendly practices. They associated this characteristic with the idea of being patient-centred. It became the practice's priority to provide quality health care for patients; thus, it was vital to maintain amicable relationships with patients. As an example, Practice C, believed that being a friendly practice meant that staff were becoming more accessible for patients. In this sense, the practice made every effort to customise its services by opening for late evening appointments and having friendly staff and clinicians to assist patients.

> *Friendly, approachable, we offer late evening services. We've got nice approachable GPs, flexible appointments working hours, very efficient nurses, health care assistants. We've got a phlebotomy department downstairs. Nice friendly reception team. I think we're more approachable and friendly and willing to help, assist people. You hear of some practices [where] say the reception staff are a bit frosty and things (PC.N1).*

A similar perspective was also shared by Practice D. Being the only practice in a radius of 3 miles, it was essential for the practice to sustain good relationships with patients. This became more important as the practice believed that its existence very much depended on patients. It was all about the patients, which was the reason for being a patient-centred practice.

Meanwhile, some informants expressed the importance of looking inward at the welfare of their internal staff, as well as that of patients. Friendly practices could also be represented through the ways in which they facilitated their staff with a

227

good working environment. Practice B, for example, asserted that they exert a lot of effort in ensuring that the practice was cooperative with both patients and staff.

> *Yeah, I think it's very much we're a practice of, we're a friendly practice and if you've got a problem basically, let your team leader know and it can be sorted out. We're not ones for blaming, we don't run a blame culture, if something goes wrong, it's human nature, we move forward and we learn from it (PB.A1).*

In addition, one of the partners in Practice C perceived a friendly and cooperative practice in terms of how the practice managed its relationships with other practices. He maintained that Practice C was a cooperative practice, in a way that it was willing to work together with other practices. While he asserted that there was no need to compete with others to gain more patients, he agreed that the practice would suffer if they lost patients.

> *I think we're cooperative, that's what we want to be a practice that cooperates with other practices. We're not really in competition although if patients all decide to go elsewhere we would suffer. But there's much more to be gained through working with other practices than competing. I think we would like to be seen as a stable practice that is reliable and has a welcoming identity (PC.D4).*

9.3.1.5.   PRACTICES WITH EMPATHY / CARING PEOPLE

Practice D was the only practice identifying itself as a practice with empathy and caring for people. It highlighted the need to have both clinical and administrative staff with empathy, who were willing to care for others. For Practice D, it was vital to have good staff, who would be able to produce better services The practice strongly underlined the importance of empathy in dealing with people, both patients and colleagues. Staff were expected to treat patients properly and tried very hard to fulfil their preference of care.

> *I would think the main one is empathy. That means that we still think about our patients as human beings and we have [...] we don't just do [...] we don't just say to them we can't do that because we feel that doesn't need to do something, then we will [...] we will do it (PD.A2).*

228

9.3.1.6.   COMMUNITY-BASED / TRADITION-ORIENTED PRACTICES

Amongst the four practices, only Practice D was located in a semi-rural area. All informants in Practice D confirmed the practice's strong attachment to the local environment and people. Besides the close relationship with patients, most staff in the practice came from or lived in the area. Based on this fact, Practice D identified itself to be a community-based practice, as well as tradition-oriented practice.

> *I would say they liked the practice, it was a big part of their life, it's a big part of the village, the GPs are all local, half the staff were local, and people knew everybody else (PD.N3).*

Informants also asserted that it was not only location that contributed to practice's identity as a community-based practice, but also staff and the organisational ethos that strongly differentiated Practice D from other practices.

> *I suppose location is one of the things unique to the practice. The fact that we're semi-rural, makes us a little bit more individual to some of the other practices around. But the practice isn't the building or the location, it's the team and the ethos of the practice and the people working within it, which create the identity; because if you pick another practice, another team another way of working and put them in here you'd get a different practice and I'm sure the patients would pick up on that as well (PD.D1).*

9.3.1.7.   MODERN PRACTICES

Practice C informants identified the practice as a dynamic and modern practice. This identity was associated with the practice's new, modern facilities. Equipped with such facilities, the practice expected to be able to meet a wide range of patients' needs.

> *A dynamic, forward thinking, upmarket practice modern. I'd like to think we are appreciated, the patient's expectations are met. We've got bright new, modern surroundings, comfortable, easily accessible, a lift for the elderly. I hope people see us as a new, innovative venture in this area. As opposed to being in an old-fashioned building with limited facilities (PC.N2).*

9.3.2. PERCEIVED CHANGES ON ORGANISATIONAL IDENTITY

Most informants expressed that even if there were some changes, they did not significantly change the way they perceived their practice's identity. They pointed out that QOF was not the only factor that affected organisational identity, as the wider organisational environment was also perceived to contribute.

9.3.2.1. STRENGTHENING THE IDENTITY OF BEING FORWARD THINKING PRACTICES

For some informants, QOF was perceived to strengthen the identity of the practice as being a forward thinking practice. This was justified through relating the practice performance with the QOF score obtained for the last 5 years.

> *For example, for the first year, we already got the top mark, because we are a forward looking practice, we always had senior GPs, pretty much care about clinical governance, care about patients. If you don't have the right people, you cannot have the best QOF. It is written by somebody else, but if it is not implemented then it will not happen (PA.A2).*

QOF was perceived to strengthen a practice's identity through formalising what the practices had already done prior to QOF, for example, establishing chronic disease clinics.

> *But QOF has replaced what was there before, in the different format, certainly evolution of the care of the patients in a differently formalised way (PA.A2).*

> *They had to learn how to enter the data so we could record it. And bringing patients in we had a lot of training for nurses especially on chronic diseases; diabetes; asthma; COPD, so that nurses could do a lot of the base work of these checks and we put things into a more formalised fashion. They would have been done in the past but not in such a formalised fashion more organised way as we did once QOF came in (PC.A1).*

While informants had already identified their practice as a good practice, QOF pushed them to redefine the meaning of a good practice. In fact, informants asserted that with the QOF implementation, the identity of a good practice could be associated with a practice's ability to achieve the QOF targets.

> *It's not so much that you want to get the targets for the money, you want to be seen to be a good practice and if you've hit your targets, it's implied that you're a good practice. That's the only way the people can mark it apart from personal experience. So, somebody looking on the outside, from the PCT, might look at a practice with a lower QOF who were working very hard in other avenues and were doing some other very good work that's not QOF related and not hitting their QOF targets, but on that they wouldn't look such a good practice. So, it's partly you want to be seen to be being a good practice I suppose. It's implied if you've got all your QOF you're working hard and looking after your patients well (PC.D6).*

More importantly, QOF could also be seen as a tool to measure whether a practice was really a good practice. Through achieving the QOF targets, it was easier for practices to justify and strengthen their identity of being good practices.

> *The patient questionnaires and surveys that we've had done, we've always got really quite favourable reports about the staff, the receptionists, the nurses and the GPs. There's been little fault there at all, but what they haven't liked is the booking of the appointments, the access, the phone system, so we've tried to address that as well, with how they can make their appointments. But generally I think the patients, supported by survey results, feel that it's a good practice with caring people (PD.D1).*

Although agreeing that QOF probably changed the definition of good practice, one informant in practice D expressed that it did not necessarily reflect an actual good practice. She personally felt that they might not be as good as they were before QOF. She emphasised that it was more important to know about a practice's image from the patients' perspective, rather than its identity from her perspective as an employee.

> *I think they see that we provide a good service. But I think that's changed. I don't think they think it's as good and we provide as*

good a service as we have done in the past. [...] I just think because of the changes, they have to wait longer for appointments, the telephone system, they're not happy with the telephone system we have at the moment, there's a lot of things patients aren't happy with. One patient said to me recently that the surgery didn't have any empathy anymore, or any caring aspect to it, and I think a lot of patients feel like that (PD.N2).

9.3.2.3 FOCUSING MORE ON THE DEVELOPING THE PRACTICE'S INTERNAL CAPACITY

Referring back to the findings in the chapter of organisational structure, it was found that QOF contributed to the workload increase in most practices. The effect of this was a tendency to delegate more clinical work to lower level health care professionals. Consequently, such delegation required competent staff to conduct the tasks. Thus, it can be said that QOF enhanced the practices to focus more on developing staff' skills, both clinical and administration /IT -support skills. In line with this, some informants stated that their practice's involvement in the Investors in People framework helped to lock the value of appreciating the importance of people for the organisation. Through this, staff were expected to reflect the values to outsiders or establish the organisational image.

Oh we've got investment, we've sailed very easily through Investment in People, which that, where the real culture examination happens, and it has been revalidated for three years. So, that is a thermometer where people have an opportunity if they wish from outside to tell an outsider (PB.D1).

I think that we do have this ethos [...] this family sense is very strongly, equity of partnership, the partners being equal. In many practices it is quite hierarchical. But to me that's the strength of general practice is this family thing. You're doing things together and reacting together, so we're a bit different in that respect. But there are plenty of other practices which are like ours too. So, I think you probably have those practices that are rather hierarchical and have a clear management structure and then you have practices more like this, that have an open, inclusive, developmental approach to the work and the staff (PB.D4).

In sum, QOF not only drove the practices to develop people skills and knowledge, but also encouraged people to work cohesively together to fulfil QOF targets.

232

These aspects were perceived to strengthen a practice's identity as a people-oriented organisation and as being a good practice.

9.3.2.4. THREATENED IDENTITY: COMMUNITY BASED PRACTICE

Some informants put forward an important point, that the changes experienced by the practice organisations might not only be caused by QOF; in fact, environment was also perceived to strongly affect the practices. For some informants, changes in the practice environment were seen as challenging the practice's identity rather than strengthening it. This related especially to the community-based practice identity.

> *I think we're in a state of flux really because for years it's been a very local practice where the communities it's served were smaller for a start, and the GPs were here for years and years, so you had a very close knit cohesive community, with the practice perhaps at the centre of it, which was, I wouldn't say accountable, but open [...] that's probably the wrong word as well, but had a very close relationship, everyone knew each other, they all knew the doctors and what was happening, and I think there's been a period of change where the communities themselves have developed in terms of numbers, we have lots of new developments, far more social mobility, which affects the local populations. The practice has got bigger, so we've had new GPs, and GPs who are not working full time, so they're part time, so it's harder for the patients to see the same GP, and I think as we've gone on, we've probably lost some of the identity we had as the really community focused, that I think a lot of patients, particularly the older patients remember and want, and that's a challenge for us, because I'm not sure how feasible it is for us to be able to have that identity, or be able to do that at the same time as meeting all the needs of everyone who's demanding certain services, certain targets to be met (PD.A3).*

This case was strongly evidenced in Practice D. Informants claimed that the practice was very attached to its community and that any changes in the characteristics of the community would affect the practice considerably. As the community develops, it demands more services; unless the practice enlarged its capacity, it would not be able to meet these demands. Such decisions required the practice to equip itself with more expertise, which meant hiring more competent people. While this was considered necessary to accommodate the demands and

233

QOF, it also potentially eroded the practice's close attachment to the community, hence, weakening its identity as a community-based practice.

> *[...] whereas now they come in and say 'oh I don't know who that doctor was' or 'I've never met that doctor', or we've got a lot more staff turnover than we ever used to have (PD.N3).*

> *I think we have got a lot of nursing homes around because many are older populations, but certainly people come knowing that, a lot of patients have known the old-school GPs, because we've had such a massive change in GPs with all the older GPs have known a lot of the patients for a lot of years, so they've always had a family doctor. I think that's going to change quite a lot because now, the younger GPs, who don't work as long hours as the older GPs did, they might not be able to get in with their GP, their waiting times are longer. I think things have changed, not necessarily with QOF but with the big changes that have happened with the GPs. I think people's perceptions are that, it is a good practice and hopefully they're happy with it. The patients surveys that they've done, we've got quite good results on those, by how quickly they can get appointments, how accessible we are and things. I don't know, I think there might be some changes over the next few years, when the last our senior partners retire. Might be good might be bad, don't know (PD.N4).*

To sum up, these findings show how informants perceived their practice's identity. Although QOF was acknowledged to contribute to changing the identity, it was not the only factor. Changes in the practice's internal and external environments were reported to be influential in altering the identity of the practice.

9.4. CONCLUSION

It is apparent that QOF had brought about changes in organisations. Although QOF was not the sole cause of changes, it contributed significantly to some points. In terms of organisational norms, it can be seen that people respected each other in the previous context of power and the structure was a reflection of their strong bonds. This came about as a result of working together for long period of time. Dynamics in both the external and internal environment also contributed to how norms were changed in the practices.

With all those shifts, it is interesting to know how the external environment, also affected the practices' identity. Informants identified their practices on the basis of various reasons, either intangible or tangible. Moreover, in conducting the process of identification, informants not only referred to their internal framing but also referred to how the images of the practices were captured by patients. Finally, in constructing a practice's identity, the basic reference lay with the patients; most informants identified their organisations as being patient-centred practices. Having this as the main identity, practice staff would like to be as the title of their practice.

CHAPTER 10

DISCUSSION

10.1. INTRODUCTION

This research study is based on an in-depth qualitative case study approach in four GP settings in the north of England. The primary aim of the study was to understand how and why QOF has influenced GP practices in implementing organisational change. More specifically, the study has attempted to explore the phenomenon of change in terms of direction and the level of change.

The framework of the research was built based on two bodies of theories; organisational change and organisational memory and competence. Three main analytical propositions were developed to guide the study and eventually answer the main research question: ***how and why does organisational memory contribute to the development of organisational competence in GP practices, and how do these competencies affect organisational change in such practices?*** The analytical propositions and the research framework were tested by using data collected through semi-structured interviews.

This chapter discusses the findings derived from the interviews and interprets them based on the literature. It starts by discussing sample characteristics, followed by a discussion on the key findings based on the working hypotheses and the analytical propositions.

10.2. THE CHARACTERISTICS OF THE SAMPLES

The study was conducted on four large practices in non-deprived areas. Although Practice C was only formally established in 2006, it was created from merging two well-established practices; so, all four were long-standing practices. Practices A, C and D had more than 10,000 patients on their registered lists; Practice B had more than 19,000 patients. The study was conducted on large practices with the

assumption that they would have more resources to deal with QOF. Moreover, the justification for dealing only with four practices was a response to the review of the qualitative case study literature, which suggested that 2-4 GP practices are enough to obtain meaningful and consistent results.

Each practice had its own characteristics, especially in terms of location and the nature of the partnerships. In terms of location, Practice A was located in a city centre, while Practice B was located in one of the outer suburbs of the same city. Practice C was located in a town, and shared its practice site with another 3 practices. Practice D was the only practice located in a rural area, and its catchment area bordered an area managed by a different PCT. In terms of partnerships, Practice B was the only one that had a partner with a non-clinical background, who was the Practice Manager. Practice C was a merger of two independent practices, with a merged partnership and no salaried doctors. The partners and the staff who were working at Practice D were all female.

Although it was planned to have ten to fifteen participants per practice, only thirty nine informants were willing to participate in the study, with ten from three of the practices and nine from Practice A. As an understanding of the subject matter was important, Practice A decided to have only nine people taking part, on the ground that there were no other people in the practice familiar with or having an understanding of the QOF context.

In order to draw a comprehensive picture of the direction and level of organisational change that was undertaken after the introduction of QOF, the research gathered information from various members of staff, comprising 15 GP partners (38.46%), 2 salaried doctors (5.13%), 4 practice managers (10.26%, including 1 admin partner), 9 nurses (23.08%), 2 healthcare assistants (5.13%) and 7 administration staff (17.95%). During the interviews it was noted that there were two main clusters of informants. On one hand, there were partners and practice managers and on the other, there were nurses, HCAs and administration staff. The key difference between these streams lies in the way they responded to the questions. While the first stream was more able to give information and

comment on changes at the strategic level, those in the second stream provided evidence of their practice's engagement in the change process at the operational level and in the day-to-day work activities.

Finally, from an organisational memory and competence perspective, years of experience played an important role in two ways. Firstly, informants with long years of experience were able to give a longer time frame in comparing the present and previous practice contents. Secondly, they contributed more in providing detailed descriptions of contextual changes that occurred after the QOF than those with fewer years of experience. However, it was not surprising to see that in developing competence, practices did not use length of employment to prioritise people for training and courses. This indicates that everyone had a similar opportunity to develop their skills and contribute to the practice's memory capacity.

10.3. QOF AND ORGANISATIONAL CHANGE

10.3.1. PERCEIVED IMPACTS ON PRACTICES

To some extent, the four practices were evolving analogous organisational forms in response to the QOF. The perception of healthcare professionals towards the impact of QOF on their practice was interesting. GPs widely understood that QOF had helped support 'evidence-based practices'; they have reached the idea that the quality of their services can be measured and the presence of guidelines and QOF targets are perceived by many as helping them to deliver a better quality service. A similar view was reported by McDonald et al. (2009) and there has been an increasing interest in the 'evidence-based medicine' in the UK since the1990s (Checkland, 2004b). On the other hand, QOF has been perceived as a way of justifying the Government's decision to provide financial support for GP practices. While it was necessary to support primary care practices financially in providing health care services, the Government needed a device to measure a practice's performance, to determine the amount of funding they merited.

QOF can be conceived as a standardised instrument to improve the quality of healthcare services by fulfilling predetermined targets set up by the Government. This means that QOF as a robust computer-based system can be used by practices to prove their ability to provide a quality service without any apprehension about potential fraud by other parties. In contrast, it also represents increasing control from the Government over GP practices. As shown in Chapter 6, QOF contributed to about 20-30 % of the case study practices' income. Although participation in QOF is voluntary, practices considered fulfilling QOF targets to be a source of fresh funds to help them in running day-to-day operations and meeting increasing patient needs and expectations.

Considering the importance of QOF in both financial and service performance, and the task of implementing the new QOF related work, it was unsurprising that practices invested extra resources, in both clinical and administrative areas, to achieve maximum QOF points. This in turn meant that practices maintained their income and staffing levels. Such investment included staff development programmes, setting up new Information Systems and setting up chronic disease clinics. Congruent with previous literature, the findings also revealed that practices responded to the QOF by training and recruiting additional nurses, HCAs, administrative staff and data management staff (Roland et al., 2006; Gemmell et al., 2009).

The data showed that all four practices achieved high QOF points between 2004/05 and 2008/09. Yet, all practices saw a reduction in the average level of achievement in the 2008/09 year of assessment. Informants attributed this reduction in points to the changes in QOF indicators. Some indicators were perceived not to reflect clinical performance and were added because of political interference. Some others were not considered to be clinically possible to achieve, especially when they were related to patient characteristics. GPs also expressed concerns about how the indicators were assessed, especially those related to the Patient Experience domain, which was considered to be scientifically flawed, as it did not represent the whole population of patients.

However, in general, all informants agreed that QOF had helped their practice to improve its service performance, represented by improved healthcare facilities, an expansion of the services available, and improved staff knowledge and skills which enhanced the practice's organisational memory capacity. The recall system used under QOF enabled practices to engage in proactive patient care, which was conducted through regularly inviting chronic disease patients to attend the clinics. While this shifted the orientation of practices to do more preventive care, it did not really manage healthcare. Van den Heuvel *et al.* (2010) found that QOF was about managing chronic illness, but it did not necessarily lead to managing healthcare. This can be understood as QOF dealing only with patients diagnosed with chronic diseases and ensuring that those patients have their health checked regularly. In other words, QOF helped GP practices in better patient management rather than focusing on preventing illness or managing healthcare. Indeed, informants reported that patients tended to receive more treatment compared to the period prior to QOF. There was also a concern that patients were over-treated under QOF. This finding strengthens the idea that QOF tended to shift patient care away from holistic care to a more 'biomedical' approach to care. As practices were aware that their performance was assessed through QOF targets which were 'clinically demanding', they tried to cure or treat patients within a certain period of time, so that the relevant targets could be achieved (Checkland et al., 2008; Checkland and Harrison, 2010).

This study also strengthens the evidence of the dysfunctional consequences of P4P programmes as shown in the literature review (Beaulieu and Horrigan, 2005; Maisey et al., 2008; Campbell, 2009; McDonald and Roland, 2009). The healthcare professionals confirmed that there has been some disturbance in the dynamics of the patient-clinician relationship, caused by the need for clinicians to enter patient information into the system and ''chase'' scoring QOF points. While it was important to demonstrate performance, obtaining data tended to divert the clinician's attention away from the patient. To some extent, informants asserted that QOF was more about a target-centred approach than a patient-centred

approach; the excessive use of protocols and templates led to over-treating and added a sense of bureaucracy to clinical activities.

QOF was also reported to increase the workload, especially for the nursing team. Along with changes in consultation room dynamics, the frequency and the difficulty of patient visits also added to the complexity of work. As cited in Gemmell et al (2009) work load is 'a complex concept that encompasses hours of work, the difficulty of work and subjective feelings of overwork'(Groenewegen and Hutten, 1991). The work complexity is strongly related to the degree to which the work performance requires skill, intelligent and personal judgment (Naoi and Schooler, 1985).

This higher workload was due to the fact that the practices needed to manage chronic disease patients, ensuring that patients visited the practice and carrying out regular investigations as scheduled. Patients, who did not report for their scheduled visits, had to be moved to exception case lists. The same findings were reported by various empirical studies, which argued that practice nursing staff and HCAs had absorbed a high proportion of QOF work and QOF not only led to an increase in clinical work, but administrative work as well. While doctors gave more attention to complex chronic and preventive care, practices invested nursing time in dealing with stable acute and preventive care (Whalley, Hugh and Sibbald, 2008; Gemmell et al., 2009; McDonald and Roland, 2009).

On the positive side, the increasing workload was also seen as an expansion of roles and responsibilities for the nurses, and they were proud and more confident of their new job roles compared to their previous job descriptions. The practices, in turn, had to ensure that their nurses were qualified to do the jobs. The findings were consistent with previous research showing that nurses in GP practices had been given more responsibilities and experienced enhanced clinical roles as they worked on delegated routine clinical work and protocol-driven jobs (McDonald et al., 2007; Grant et al., 2009).

This study also found that there was a shift in the role of practice managers, who had become more involved in the process of decision making, especially related to QOF target achievements. They were actively involved in managing, and to some extent controlling, how the clinical leaders, who were commonly partners, fulfilled QOF targets for their area. Moreover, their increasing role was also contributed by the growing importance of the IT/data management division, which was usually responsible to the practice managers. This finding corresponds to previous studies, which found that managers contributed significantly to ensuring that their colleagues fulfilled their responsibility, so that QOF targets could be achieved (Grant et al., 2009; Checkland and Harrison, 2010). However, this research was able to find a clearer limit to the role of managers. With the exception of the manager of Practice B, who was also a partner; managers from Practices A, C and D did not have similar rights to the partners in the strategic level decision making process.

It was interesting to find out the perception of the informants of how QOF had affected their practice's norms and identity. In this vein, the informants' concerns were related to individualised/personal continuity, coordination of care and patient choice. Comparing their previous experience in the practice, informants acknowledged that after QOF patients were not able to see their preferred physician in the same way as before. The increased workload and large team size meant that patient choices had become less possible, and that patients tended to see different clinicians during their visits. This situation represents a shift in the norms guiding the relationship between clinicians and patients, for example, informants in Practice A believed that continuity of relationship with patients brought efficiency in providing care. Ensuring continuity meant that clinicians understood a patient's medical history, so that they would be able to deal with them more quickly. Several previous studies also present similar findings, that care became less personalised and patients were treated as 'labelled grouped not individuals' (Roland et al., 2006; Checkland, McDonald and Harrison, 2007; Maisey et al., 2008; Campbell, 2009).

In this sense, Roland (2006) asserted that the long-term relationship between clinicians and patients has a potential impact on patient health for several reasons: 1) Trust between patient and clinician develops gradually over time and this make both of them more confident; 2) a long relationship helps clinicians to manage the patient case properly and more easily; 3) It reduces the chance of medical errors, because the clinician is aware of everything related to the patient. By setting up chronic disease clinics that were mostly run by nurses, there was more possibility of patients seeing nurse practitioners than doctors. However, the findings reveal that some patients were not happy with such changes; even though the nurses were spending more time with them in the consultation and giving them more chance to talk freely about their health problems.

Less personalised patient-clinician relationships were also perceived to change a practice's identity. Practice D, for example, reported that its identity as a community-based practice was threatened by this change. However, it was not entirely caused by QOF; changes in the external and internal practice environment also threatened the practice identity. In addition, the practice reported experiencing less close personal relationships amongst healthcare professionals compared to before QOF.

From a more positive perspective, however, QOF was perceived to encourage practices to develop their internal capacity. Referring back to the discussion about staff development activities as a result of QOF, informants perceived that it was a good development for their practice's internal capacity. QOF was also seen as strengthening the identity of being a forward thinking practice and shifting the way to redefine a good practice. Prior to QOF, good practices could be seen through the perceived quality of staff, facilities or other internal aspects of an organisation. After QOF, as performance was assessed through the ability to achieve QOF points, the definition of a good practice might be channelled only to QOF related activities.

In general, all of these findings strengthen the results of previous studies, which found that QOF contributed to various organisational changes in GP practices.

Evidence from previous studies shows that practices engaged in various changes in organisational strategy, structure, identity and organisational process.

10.3.2. SUMMARY

From the informants' perceptions, it has become clear that QOF had several impacts on the GP practices. The findings can be summarised as follows:

Table 23. Summary of the Findings – QOF Impacts

No.	Findings	References	Contribution of the study
1.	Shift to preventive care	(Van den Heuvel et al., 2010)	QOF shifted practice to become more proactive rather than reactive. Although this was a good development, literature argued it was still about managing illness, not managing healthcare.
2.	Training IT staff	(Roland et al., 2006; Gemmell et al., 2009),	Compared to previous studies, this research found that practices also engaged in recruiting and training staff to deal with IT processes, especially in data management.
3.	Disturbance to the dynamics	(Beaulieu and Horrigan, 2005; Campbell, McDonald and Lester, 2008; Maisey et al., 2008; Campbell et al., 2009; McDonald and Roland, 2009; Van den Heuvel et al., 2010)	This study confirmed the results of previous research that P4P caused disturbance to the clinician-patient dynamic.
4.	Increased workload	(Whalley, Hugh and Sibbald, 2008; Gemmell et al., 2009; McDonald and Roland, 2009)	Similar to previous studies, this research confirmed that both clinical and administrative workload increased.
5.	Threat to continuity of care	(Roland et al., 2006; Maisey et al., 2008; Campbell, 2009)	Fragmentation of care was also reported by informants. This was mainly because increased workload meant that doctors delegated more work to lower level healthcare professionals and made it less possible for patients to see their preferred physician.
6.	Expansion of roles for nurses	(McDonald et al., 2007; Grant et al., 2009).	Nurses confirmed that they had experienced expansion of their roles, especially related to conducting routine clinical work. While this was the case, this study also found that nurses delegated some of their clinical duties to lower level HCAs.

Moreover, informants' views on QOF provided several critical insights with regard to the existence of QOF for the practices. Three key points need to be addressed in this matter.

First, QOF established centrally developed indicators to assess primary care practices' performance. While this was meant to standardise care, it also pushed practices to think that their performances were now being compared with each

other. In that sense, practices were more aware of the need for obtaining a high QOF score. This created a sense of competition amongst them, although practices tended to think that they were not competing with other practices. Practices became more concerned about the money available from the PCT, so that the partnership put significant efforts into ensuring that maximum QOF points could be achieved. Most informants confirmed that practices had now become more 'money' and 'target' or 'business' oriented.

Second, QOF was established in line with the idea of evidence-based primary care practice, intended to improve the quality of healthcare service delivery and that was understood by the practices. However, while the final goal of QOF is to improve the quality of healthcare services, the need to provide evidence seemed to shift the attention from care to indicator fulfilment. The intensive use of templates and databases in the Information System formed a dual agenda for clinicians, and this in turn might have led to a distraction from the patient-clinician relationship. In this sense, the study suggests that QOF can both benefit and hinder patient care.

Third, with centrally developed indicators, templates, and measurements of clinical and non-clinical (i.e. patient experience) indicators, practices were pushed to work on their healthcare service performance if they wanted to have fresh funds available to them. This represented the idea of performance-based payment and control from the Government of primary care practices. It was mentioned by most partners that with the Government imposing various changes in indicators, achieving high QOF points had become increasingly difficult. While it may reflect higher expectations of quality, it can also be perceived as increasing control from the Government.

In dealing with the requirements of QOF, practices initiated several changes to ensure that they coped with the work. A detailed explanation of how practices went through the changes is given in the next section. It is interesting to note that although these changes were initiated as a response to QOF, some of them were strategic in nature.

Apart from the interview content, another insight that can be extracted from the findings is related to how informants responded to the interviews. In assessing their perspective on QOF, informants tended to recall their own individual memories on their experiences prior to QOF and compare between previous and current experiences. This reflected the importance of individual memory in building knowledge of organisational context and content, as well as how they were involved in changing the context itself. The next section provides an empirical test of the research analytical propositions.

10.4. ANALYTICAL PROPOSITION 1: ORGANISATIONAL MEMORY AND DIRECTION OF CHANGE

10.4.1. FINDING 1. ROUTINES AND RESPOND TO CHANGE

As stated early, there is an ample supply of literature available on the organisational changes that took place in GP practices after the implementation of QOF, such as delegation of work (i.e. Checkland et al., 2008; Gemmell et al., 2009), expansion and re-stratification of roles (i.e. Checkland, 2004a; Roland et al., 2006; Leese, 2007; Griffiths et al., 2010) and staff recruitment (i.e. Roland et al., 2006). These changes were captured as results rather than processes, while this study has focused on eliciting the processes and reasons underlying practices' decisions to conduct such changes. The study has attempted to explore the nature of organisational change through the four practices' organisational competence and memory. In the knowledge management and OM literature, routines as a memory repository that construct procedural memory can be used to explain the processes and results of organisational change (Miner, 1991; Pentland and Reuter, 1994; Adler, Goldoftas and Levine, 1999; Feldman, 2000; Becker, 2004; Tsai, Lin and Chen, 2010). More importantly, routines contribute to competence development as organisation repeatedly conducts particular activities and use-reuses knowledge relevant to these activities (Gersick and Hackman, 1990; Cohen and Bacdayan, 1994; Feldman, 2000; Becker et al., 2005).

The four practices acknowledged that their organisational strengths were developed through routines embedded in their years of experience. This can be reflected through organisational and individual experiences. Experiences and knowledge owned by individual health care professionals, collectively built up the practices' strengths. Their understanding of the condition of patients and their practice's environment contributed to the quality of services provided by the practices. This was aligned to the idea that an organisation does not possess memory, as it is the individual or group who own knowledge or skills, yet their skills and knowledge, hence competence, are stored in variety of ways, such as rules, procedures, databases and/or the people, that are able to be used and re-used through dynamic interactions (Nelson & Winter, 1982; Anand, Manz and Glick, 1998; Cong and Pandya, 2003; Weinberger, Te'eni and Frank, 2003; Winter, 2003; Tsai, Lin and Chen, 2010).

Organisational competence was also supported by the advantage of being the first movers and consistently being patient-oriented. Long years of experience provided the practices with the opportunity to learn through continuously and repeatedly doing things. Being the first mover meant that practices acquired certain routines earlier than others, which put them in the foreground in clinical practices and strengthened their identity as forward-thinking practices. In this study, three of the practices, A, B and C, were relatively strong in asserting their identity to be a forward-thinking practice whereas Practice D was more engaged in strengthening its identity as a community-based practice[20]. Regardless of having different identities to convey, the four practices uniformly believed that their strong patient-orientation, which was resiliently embedded in various day-to-day activities, strengthened their close relationship with patients over time. These three aspects (experience, being first movers and patient orientation) were intertwined in building the practices' routines over time, which generated and intensified the practices' procedural memory. According to the practices, their

---

[20] Amongst the 4 practices, Practice B and D identified themselves as community-based practices. In addition, informants also strongly identified Practice B as a forward thinking practice, which was more evidenced in the narratives than the identity of a community-based practice. The findings discussed in this particular context do not intend to nullify the fact that the practice was a community based practice as identified by some of its informants.

routines aligned with QOF activities, which made them felt more confident and more prepared than other practices; thus, they responded better to the QOF scheme. This finding confirms that routines were formed historically and that the time dimension was important. As stated in Chapter 4, the repetition embedded in routines means that people call and recall their memory, employing it to help them do their jobs, and became more competent (Nelson & Winter, 1982; Levitt and March, 1988; Dosi et al., 2000; Becker, 2004).

The finding also supports the notion of changes in competence usually being path-dependent (David, 1997). This has dual implications, the GP practices consistently developed their competence over time, at the same time, it possibly leads to the thought that GP practices were less adaptable to change. Interestingly, there was no evidence of inflexibility to change; the study found that the practices engaged in the development of new routines which overcame path-dependency.

The four practices took advantages of their embedded routines; however, at the same time, in order to implement QOF, the practices needed to make adjustments to their routines, or even develop new routines. Care of chronic diseases was previously part of the routine services provided, yet, all four practices agreed that before QOF, chronic diseases were not managed formally. With the introduction of QOF, practices started to manage these diseases by appointing clinical leads. This aligned with Checkland and Harrison (2010) who reported practices assigning clinical leads and setting up new chronic disease clinics to cope with QOF.

The findings show that clinical lead roles were assigned to GP partners with relevant competencies in a particular area. On this basis, practices found that some of the required fields of expertises were not part of their routines or available in the practice. This urged partners to change or shift their interests or specialisations to fit the QOF requirements. These decisions were associated with the availability of expertise, rather than the number of practitioners. Consequently, a disruption in routines took place, as practices needed to deal with different paths of routines,

rather than with what they had been used to doing. This also proved that QOF influenced the practices' decisions to fit their routines to what QOF required.

It is important to underline that the findings contradict the idea that strongly held routines tend to hinder organisations from change (Miner, 1991; Adler, Goldoftas and Levine, 1999; Feldman, 2000; Becker, 2004; Tsai, Lin and Chen, 2010) . In fact, practices were proven to be rather flexible in adjusting their old routines to the new ones. In accordance with organisational memory processes, it can be said that the practices engaged in the process of 'unlearning', which was actually part of the maintenance processes in the knowledge reservoirs (Stein and Zwass, 1995; Wijnhoven, 1999). The unlearning process is important to provide room for improvement and change to take place in organisations (Stein, 1995; Wijnhoven, 1999). This was a necessary step if practices wanted to maintain a good performance. Furthermore, it implies that the practices' compliance with the government scheme was necessary to sustain their income. This finding confirms the idea that change may occur as organisations perceive it to be a necessary action to ensure their sustainability (Levitt and March, 1988; Cohen et al., 1996).

On the other hand, practices' compliance with government regulations through QOF confirms what Wilson (1992) argued to be a political process, which characterised decision making during the development of change. From this perspective, it can be said that practices engaged in emergent change (refer to figure 15).

To sum up, although change in the GP practices is an interplay of history, government regulations and organisational competence, the findings strengthen the argument that the practices strongly addressed their routines in conducting changes as a response to QOF. Thus, these findings strengthen the hypothesis that ***the more a GP practice is involved in procedural memory (routines), the more likely it will be competent to implement changes in response to QOF (H1).***

10.4.2.   FINDING 2. MEMORY AND STRATEGIC DIRECTION

This research associated the direction of change with changes of organisational strategy, based on the idea that organisations may anticipate or react to any trigger of change from their external and internal environment by engaging in the process of re-creation or re-orientation of strategy (Nadler and Tushman, 1989; Iles and Sutherland, 2001). Other authors argue that organisational change might refer to the effect of the organisational renewal process on their capacities to correspond with the internal and external environment (Moran and Brightman, 2000).

It was intriguing to explore how practices engaged in strategic processes. While they had organisational strategic plans, the practices were not convinced of the necessity of having such strategies. At one point, it was argued that GP practices should not position themselves as competing with each other in a market-like industry. This was thought not to conform to the organisational ethos as a practice organisation, whose main aim was to provide healthcare services for patients. Another perspective was related to the nature of ever-changing policies imposed on primary care organisations in the UK. With frequent changes imposed by the Government, having clear strategies was perceived to be unnecessary. This was due to the fact that GP practice directions are defined by government through their policies. Informants asserted that practices did everything that the government required them to do. In other words, this implies strong control of the government over the management of the practices.

Some partners added that even though they had a strategy for their practice, it would not reflect the practice's long-term plans, as there were many uncertainties in the practice environment. Related to the discussion in the previous section, a practice's decision to engage in QOF involved the political process in strategic decision making (Wilson, 1992). Practices took the decision on that basis to ensure sustainability of income, which was crucial for staffing and running day-to-day activities. Accordingly, the development of organisational strategy emerged as practices adapted to external triggers from the environment

(Mintzberg, 1978; Shortell, Morrison and Robbins, 1985; Hurst and Zimmerman, 1994; Shortell & Kaluzny, 2006).

While practices were bound to follow government schemes, such as QOF, to sustain their income; the findings show that the way they engaged in the implementation processes depended on their own decisions. Interestingly, it was found that practices developed their own strategies to fulfil QOF targets through assessing their competences, as well as the resources available to them. As stated above *(Chapter 10 Section 10.4.1),* routines helped practices to justify what they were good at and enhanced their capability in offering healthcare services for patients based on their competences.

Not surprisingly, there were similar patterns on how the four practices developed their strategic responses, such as assigning clinical leads, establishing chronic disease clinics, recruiting more staff and delegation of work. These support previous studies exploring how practices respond to QOF (i.e. Checkland, 2004a; Roland et al., 2006; Leese, 2007; Gemmell et al., 2009; Griffiths et al., 2010). However, how those strategic changes were conducted depended on a practice's strengths and weaknesses, hence, their competences.

In addition, practice decisions were also influenced by their individual situations. Practice B, for example, already had a strong audit team, so that when QOF came in, the practice was ready for it and merely needed to adapt it to the QOF requirements. Another example was shown by Practice C with its IT system adaptation. Compared to other practices, Practice C was a relatively late adopter of the type of IT system used with QOF. This situation could be traced back to pre-merger practice routines, which were not heavy IT users; this in turn affected the current practice's actions. These examples show that practices elaborated on their assessments of what they were good at and also what they were weak at, reflecting on both their successes and failures. This process was considered important to ensure the feasibility of implementing alternative strategies with the practice's resource constraints. At the same time, this contributed to their memory

capacity, as practices learnt through their previous experiences or activities (Aguilar, 1967; Wijnhoven, 1999).

From a broader viewpoint, the findings also show how partners learnt from their experiences of failure or success in managing their practices organisations. One of the prominent issues was related to government funding; over time, the four practices learnt that it was becoming more difficult to gain funding through various medical contracts, for example, the QOF indicators and allocation of points were continuously being changed by the Government. While the Government argued that such changes were necessary to reflect an improvement in quality; for the practices, they were perceived as a hindrance to attaining maximum points. To some extent, this potentially de-motivated practices. Furthermore, the practices under study realised that there would be potentially limited financial resources from the Government in the future. Thus, the practices learnt that there was a need to go beyond their traditional therapeutic roles and explore other opportunities to find financial resources. In turn, the intention to sustain a practice's income flow urged the partnership to think and build strategies which aided the practices to accommodate changes and deal with them appropriately. Practice B, for example, expanded their business through diversification and opening other branches. Practice A also ran its operation on two sites to include a wider area of coverage. Practices also set up their strategic aims differently, by examining their potential market, such as becoming a research practice or maintaining a practice's long-standing identity.

Elaborating on the discussions in the previous section and this section, it is clear that practices considered what was necessary to comply with government regulations to sustain their income. This strategic decision to change depicts the political processes model. In addition, as practices obliged in implementing QOF, they needed to fulfil the targets set up in QOF. To do that, the findings evidence that practices strongly considered their successes and failures to help set up the strategies or approaches which best suited them in responding to QOF. This aligns with the idea of *contextualism* in implementing change, which means that

'implementation is a function of antecedent factors and processes' (Wilson, 1992). The practices were different in their approach to implementing change, considering their histories or experiences. The findings also correspond closely with those of Huby et al. (2008), who reported that each GP practice had its own story of change, which reflected its different style and ethos.

Thus, it can be said that the findings support the hypothesis that ***the more GP practices are aware of previous failures and successes and the more they integrated knowledge into their organisational memory, the more able they are to develop an organisational strategy in response to QOF (H2).*** This includes all preceding factors and processes taking place in an organisation, which also implies that each organisation may work differently due to having their own experiences and characteristics.

10.4.3. SUMMARY

It is important to note that the notion of OM did not only emerge in terms of organisational competence which can be built through routines. OM was also reflected in how practices narrated their successes and failures. The engagement with the context provided richer insights into understanding changes in organisations, at both the process and implementation levels.

As part of the UK healthcare system, GP practices are subjected to government control through policies and rules imposed on them. This was a point of concern for partners in setting up their practice's strategic directions. While participation in the *new* GMS contract was voluntary, the four practices found that QOF brought them a considerable financial stream that helped them to sustain their service delivery.

QOF funding was attached to health care service performance, therefore, practices needed to maintain their quality of services. They were urged to make some adjustments in their routines in order to ensure that areas required for QOF were appropriately managed. The ways practices conducted the adjustments reflected their own competences. More importantly, they also learnt from their failures and

successful experiences. It was evidenced that informants evaluated QOF and how strategies evolved over time through their memories, by comparing their practice's current situation with the practice's previous experiences. This was especially strongly held for those who had longer experience working in the practice. At one point, it strengthens the path aligned to the previous experiences and leads to further exploration of how strategies were developed in the practice, by elaborating the ideas of organisational memory into the context. This also explains how despite similar patterns found in the way practices responded to QOF, the justifications and detailed implementation steps differed from one practice to another. Practices employed their memory in helping them construct the direction of change; it was found that they referred back to their memories of both successes and failures. It is also interesting that strongly held routines or memories did not hinder the change process or its implementation. In fact, as practices engaged deeply with their organisational memory, it enabled them to justify the need to adjust their routines to cope with QOF.

In general, this reflects an emergent type of change, characterised by the political process of making decisions during the process of change, as well as containing the idea of *contextualism* in its implementation.

Figure 15. A Characterisation of Approaches to Organisational Change

	The Process of Change	**The Implementation of Change**
Planned Change	1 Logical incrementalism and various needs, commitment and shared vision models	2 Reducing resistance to change (e.g. force field analysis)
Emergent Change	3 Characteristics of strategic decisions: political process models	4 Contextualism: implementation is a function of antecedent factors and processes

Source: (Wilson, 1992)

To conclude, it can be said that practices relied on their embedded organisational memory in dealing with change. With strong government regulations shaping the practice environment, each practice claimed to strive to sustain their performance. They aimed to maintain their existence in the industry through carefully developing their strategic direction, which was believed to bring them a better

financial performance and better care for the community. Practices found that their routines as well as their successes and failures helped them to engage better in defining and pursuing their aims. Therefore, the findings lend support to analytical proposition 1 that *organisational memory of core competences in GP practices shapes their organisational strategies in response to QOF*.

Table 24. Summary of the Findings – Proposition 1

No.	Findings	References	Contribution of the study
1.	Routines contributed to memory improvement, hence, developed competence	(Nelson & Winter, 1982; Levitt and March, 1988; Miner, 1991; Cohen et al., 1996; David, 1997; Adler, Goldoftas and Levine, 1999; Dosi et al., 2000; Feldman, 2000; Feldman and Rafaeli, 2002; Becker, 2004; Tsai, Lin and Chen, 2010)	This study strengthened the idea that routines enhanced memory capacity and made organisation better prepared for change.
2.	Routines helped practices respond better to QOF		Although Checkland and Harrison (2010) reached the same conclusion, there were no previous studies in this area. This study contributed to initiating the perspective that embedded routines may help organisations to respond better to QOF. Some QOF activities had already became a routine for practices, although in different forms.
3.	QOF possibly caused disruptions to the pattern of routines		This study also found that QOF disrupted embedded routines. Practices seemed to decide to engage in different or new routines to accommodate QOF and allow them to obtain high points. Yet, the decision to adjust routines was based on the practice's assessment of what they needed to do to perform better quality of services based on their resources.
4.	QOF was perceived as one of the devices used to manage primary care practice through performance-based payment	(van der Bent, Paauwe and Williams, 1999)	Practices learnt through their experiences in dealing with the Government and believed that there would be less money available for them in the future. This became the point of departure in pursuing their strategy.
5.	Learning from previous successes and failures through their memory	(Prahalad & Hamel, 1990, 1996; Barney, 1991; Parkin, 2009).	This study strengthened the idea that in developing strategy, organisations needed to put emphasis on their competences.

However, this study also found that practices aimed to pursue a particular strategy while they did not have a competence in a particular area. Indeed, |

No.	Findings	References	Contribution of the study
			they intended to work on their weaknesses to achieve their aims.
6.	OM took place in two different forms, content and context	(Bowey, 1982; Walsh and Ungson, 1991; Argote, 1999; Karsten, 1999; van der Bent, Paauwe and Williams, 1999; Wijnhoven, 1999; Feldman, 2000; Checkland and Harrison, 2010)	In analysing how organisational memory contributed to change, it was found that memory emerged in two ways. First, it was embedded in practice routines. This represents memory as the 'content' of knowledge in subject matter that built organisational competence (Wijnhoven, 1999). Second, a practice's story was presented as a context of memory development. In narrating their stories of competence, practices referred back to their experiences and at some points, compared them to their current experiences (Checkland and Harrison, 2010). Both together helped to gain a comprehensive understanding of how competence was developed.

10.5. ANALYTICAL PROPOSITION 2: MEMORY AND ORGANISATIONAL STRUCTURE

The findings discussed in the previous sections provide insights that QOF contributed to some changes or shifts in the practices' strategies or directions. Regardless of the debate about the relationship between strategy and structure in an organisation (Hall and Saias, 1980; Burgelman, 1983), several authors agree that strategy and structure should be aligned, in order to optimise the performance of organisations (Chandler, 1962; Miles et al., 1978; Hardy, 1996; Morgan, 2006).

However, there were considerable changes in the structure of the practices presented in the findings; these related to structural arrangements, job responsibility, expansion of roles and skills mixing and power dynamics in delivering health care services. For structural arrangements, the practices engaged in staff recruitment, especially nurses, HCAs and administration staff to cope with the QOF work. This strengthens the findings of previous research, that practices in the UK were found to increase the number of nurses and administrative tasks following QOF implementation (i.e. Roland et al., 2006; Gemmell et al., 2009; Griffiths et al., 2010).

The study also found that practices became more concerned about their administrative capability and support systems when implementing QOF. This was depicted through the practices' decisions to recruit or assign IT staff to manage patient databases, installing a relevant IT system and establishing a database management unit. With the notion of evidence-based practices, a relevant and accurate database was important as evidence of a practice's service delivery. Related to the accuracy of data, QOF introduced data templates which helped practices to collect the required patient information. This aligned with previous studies indicating that QOF enhanced the use of IT in a practice's system (Checkland, 2007; Grant et al., 2009; Checkland and Harrison, 2010). In broader terms, this finding also corresponds to Hurst and Zimmerman, who state that:

> *''The use of the electronic patient-health record, computer-based decision-support tools, and the health-information networks, hospital information systems all linked through telemedicine and a plethora of communication systems are working their way into every facet of the health system. Without even knowing it, implementation of these technologies is changing the traditional ways of doing things and dramatically affecting the cost, quality, and accessibility of healthcare'' (1994).*

In the context of roles and responsibilities, there were significant changes, as reported in both Chapters 6 and 8, such as delegation of tasks to lower level healthcare professionals. Delegation from doctors to nurses and from nurses to healthcare assistants/phlebotomists was intended to manage workload, especially QOF administrative tasks. Indeed, there is ample evidence stating that delegation of work was notable in many UK practices, as a consequence of the increasing workload experienced by clinicians (Roland et al., 2006; Gemmell et al., 2009; Grant et al., 2009). Practices ensured that the delegation did not affect the quality of healthcare service provided to patients by providing relevant skills training and courses for their staff. Previous research found that the *new* GMS contract provided an opportunity to enhance staff roles through conducting training and introducing a quality control system (Leese, 2007).

The findings also correspond to the results of previous studies that delegation of work brought about several consequences, including increasing the clinical roles of nurses and HCAs (Roland et al., 2006; Grant et al., 2009; McDonald et al., 2009; Griffiths et al., 2010). This was especially evident through the establishment of chronic diseases clinics, which were mainly run by practice nurses. Moreover, Griffith (2010) states that along with the increasing number of nurses, such developments were beneficial to help practices maximise QOF points, improving their performance and also benefitting patients. While those developments increased the nursing team workload, both nurses and HCAs felt that they were content to do it. This brought opportunities for them to learn new skills, have more autonomy and improve their careers. This conforms to previous studies that nurses experienced more autonomy and satisfaction in conducting their jobs (McDonald et al., 2007; Maisey et al., 2008; Whalley, Hugh and Sibbald, 2008; Gemmell et al., 2009).

The findings of this study contradict those reported by Campbell, McDonald, and Lester (2008) that there was a 'de-skilling' of doctors as a result of the increasing clinical role of nurses. Instead, this study confirms that the delegation of work and expansion of the role of nurses was seen as a form of appreciation of skills and clinical qualifications. Consequently, a sense of responsibility towards jobs was created, practice staff become more aware of their responsibilities, as well as their colleagues' responsibilities. By delegating routine clinical work to nurses, doctors became able to deal with more complex diseases. Thus, this study is congruent with Checkland et al. (2008) who reported that delegation of work enabled doctors to manage and deal with more complex issues. Similarly, releasing some basic nursing work to phlebotomists enabled G-grade nurses to perform clinical tasks suitable for their qualification and experience.

In terms of power dynamics, there were two main streams of findings, the first was related to the relationship between the practices and the PCT and the second about the relationships amongst different professions in the practices. Informants perceived that QOF signified a difference in the balance of power with the PCT,

although the difference was also attributed to the PCT restructuring and considerably increasing in size, as well as pressures faced by PCTs from the Government. Practices experienced a more distant relationship with the PCT after QOF. Interestingly, practices learnt from their experiences that in order to deal or negotiate their needs with the PCT, they needed to employ aspects that were considered important by the PCT and to bargaining collectively.

Internally, there were relatively stable relationships between the different professions. Staff were happy to work hand-in-hand with each other in teams, especially in skill utilisation. The relationship was said to be based on trust and respect. This was also supported by the practices' 'no-blame' values. In turn, this seemed to dissolve the power gap between different levels. Indeed, while the findings strengthened the idea that some individuals in the structure, such as the partners and managers, held more power, (Alexander et al., 2006; Sheaff, 2008), the relationship itself was flexible and less formalised. The practices believed that this, together with a good communication mechanism and participative decision making, helped them in managing people whilst implementing QOF. This finding was aligned to the idea that de-alienation of power and involving employees in decision making potentially reduces resistance to change (Hardy, 1996).

Specific to decision making, all practices asserted the importance of the communication and involvement of staff in the decision making process. More importantly, the study also found that practices noticed the increasing contribution and involvement of practice managers in the decision making process after the QOF implementation, similar findings were presented by Grant et al. (2009) and also by Checkland and Harrison (2010).

These findings illustrate that practices had undergone various changes, which become grounds to explore more about how the arrangement of structure affected the practices' competences in providing QOF related services.

10.5.1. FINDING 1. SPECIALISATION AND COMPETENCE IN PROVIDING QOF-RELATED SERVICES

One of the major dimensions of organisational structure is how work is distributed or assigned amongst individuals or groups in an organisation (Favela, 1997; Fiedler and Welpe, 2010). The fundamental idea of structure is about managing roles and responsibilities resulting from different specialisations of work available in an organisation, which refers to the element of differentiation of the structure (Lawrence and Lorsch, 1967). A higher degree of specialisation means that organisations become more complex and thus need to have robust integration mechanisms (Zinn and Mor, 1998; Bazzoli et al., 1999; Plsek and Greenhalgh, 2001; Begun et al., 2003). A higher degree of specialisation can be represented through different types of services provided to customers (Luke, Begun and Walston, 1994; Bazzoli et al., 1999).

In structuring their organisations, practices considered both the number of potential patients and the competence of individual clinicians. The number of patients was used to estimate the workload, so that the practice knew how many people they would need for particular jobs or responsibilities. Jobs were distributed based on competences. The more functions available in the practices, shown through the different services offered, the wider the range of expertise the practices owned and the higher degree of specialisation they exhibited. A higher degree of specialisation enhances knowledge and capabilities; as people use and re-use their procedural or declarative memory in conducting particular tasks, organisational competence is built up (Favela, 1997; Postrel, 2002; Argote, McEvily and Reagans, 2003; Fiedler and Welpe, 2010).

Specialisations in structures were also evidenced in the practices' endeavour to refer patients in specific cases to clinicians with a particular expertise. With a higher degree of specialisation appearing in the structure, expectations on competence in particular areas increased. Clinicians were reported to refer patients to other clinicians who were thought to be more competent in a particular area. As a practice, this improved the sense of team-work and it is believed to result in more

effective performance, considering that the responsibilities assigned in each specialised unit became routines (Postrel, 2002; Argote, McEvily and Reagans, 2003). This also corresponds to the study by Maisey (2008) who found that QOF improved team-working in GP practices.

Being in the same certain position or job for years provided practice staff with opportunities to learn more skills; hence, the knowledge embedded in the position became tacit for the individual and added to their memory. This knowledge was continuously used and re-used while the individuals were doing their jobs, making them more competent. In turn, such competence enabled them to deal better with patients and other people in the practice.

The engagement in applying a high degree of specialisation became more visible after QOF. For example, all four practices established a special division or unit to deal with data management. Although this was not a new development for the practices, QOF enforced the functions of these units or divisions. As stated formerly, considering the importance of this area of work, practices reported hiring specialists in the area or training existing individuals to have the necessary skills and expertise in data management.

These findings provide an insight into the idea that the more the specialised work was distributed, the greater would be the inclination for people to improve their competence in particular areas as they repeatedly did their jobs. This specialisation enabled the knowledge embedded in particular functions or jobs, and their embedded roles, to be enhanced through use and re-use of memory. In turn, practices would be able to work more efficiently. Indeed, this finding supports the idea that knowledge could be accrued through direct experiences of individuals over time (Stein, 1995).

To conclude, the way practices assigned different functions into specialised units, divisions, or departments shows the degree of specialisation in their organisational structures. More specialised unit arrangements, such as an IT division, particular chronic disease clinics or competence-based job distributions enhanced procedural

memory development through enabling regular use of knowledge in specific context, which led to competence building. In turn, such competence at particular functions or jobs made it possible for the practices to achieve their goals more efficiently. This supports the idea that the higher degree of specialisation in the structure acted as an enabler to strengthen the process of memory development, which in turn, developed competences and efficiency (Cohen and Bacdayan, 1994). Thus, it can be said that the findings fully support the hypothesis that *the higher degree of specialisation a GP practices has, the more competent it becomes at hitting the QOF targets (H1).*

10.5.2. FINDING 2. SPECIALISATION AND THE IMPORTANCE OF RULES AND NORMS

As discussed previously, routines contribute to the development of procedural memory through enhancement of knowledge over time. This leads to thinking about how knowledge is stored in organisations. There are various knowledge reservoirs mentioned in the literature, including organisational routines, people, relational, information device/modes, artefacts, policies and procedures, structures and norms and belief (Walsh and Ungson, 1991; Argote, 1999; Karsten, 1999; van der Bent, Paauwe and Williams, 1999; Feldman, 2000). Through the informants' narratives, it became clear that the practices engaged in all types of knowledge reservoirs and each contributed differently to the enhancement of memory.

Physical storage, such as information/communication devices, database systems and internal emails, enabled people to share information and knowledge. The implantation of QOF was considered to be a tool to transfer knowledge and share information among healthcare professionals. As the information was available in a database and continuously updated, healthcare professionals were able to access it and even more, to be guided by particular templates and protocol in dealing with patients. This aligned with the work of Checkland et al. (2007) that the use of databases as knowledge reservoirs helped to transfer knowledge to less competent professionals, such as nurses, in doing routine work delegated by physicians.

In addition to transfer of knowledge, the use of the knowledge reservoirs contributed to improving the transparency of information in the practices. It made the quality control process easier than before, especially related to how clinical or administration leads monitored QOF target achievements, observed the behaviour of their colleagues and managed day-to-day work. It became more possible for the leaders to check the accountability of organisation members in fulfilling QOF targets. This finding aligned to the idea that QOF led to a re-stratification of roles for "chasers" and those being chased, as well as the emergence of a surveillance regime. This represents changes in collegiality relationships, as well as control in practice organisations (McDonald et al., 2007; Huby et al., 2008; McDonald, Harrison and Checkland, 2008; Campbell, 2009; McDonald et al., 2009; Checkland and Harrison, 2010).

Without neglecting the contribution of each reservoir, practice members provided a rich knowledge repository. People stored information along with the dynamics embedded in particular information. For instance, practice members were not only able to retrieve information about what changes in policies took place in their practice; they were also able to recall how and why it evolved, as well as its impacts on them. People also had subject matter knowledge, which is important to build practice competence. Such knowledge might be gained through formal education, training, courses and years of experience or their individual routines.

To some extent, some practice members hold tacit knowledge, which is more difficult to transfer to others than explicit knowledge (Nonaka, 1994; Chou, 2005). Tacit knowledge can only be transferred through effective communication, interaction with people and teamwork (Nonaka, 1994; Chou, 2005). Practice staff also acted as a means to connect with other knowledge reservoirs, such as policies and procedures, structures and relationships between people, as well as communication/information devices.

However, reliance on people as the only knowledge reservoir had some disadvantages which related to the sustainability of knowledge in the organisation (Walsh and Ungson, 1991; Argote, 1999; van der Bent, Paauwe and Williams,

1999). When people decided to leave a practice, the turnover caused a potential loss in the organisational memory capacity. The practices therefore needed to ensure that the knowledge embedded in any reservoir is accessible for all organisational members. This became more essential with competence-based jobs, which represent a high degree of specialisation in the structure, which to some extent, divided individuals into specific functions and units. The literature demonstrates that sharing information helps organisations to collectively achieve their objectives and this requires organisations to have certain mechanisms to guide the process (Argote, McEvily and Reagans, 2003; Fiedler and Welpe, 2010). Several authors argued that formalisation is a way to coordinate such processes, through imposing procedures, rules and policies (Zinn and Mor, 1998; Aldrich, 2007).

This study found that practices were engaged in several ways to ensure that knowledge was dispersed and shared formally and informally, especially with the fact that the GP practices were becoming more complex organisations, with a higher degree of specialisation. Indeed, previous research also confirmed that QOF contributed to an increase in the level of complexity in GP practices (Checkland and Harrison, 2010). In a formal way, mechanisms such as reports, meetings and feedback sessions were argued to help people to learn from others. Furthermore, the availability of information embedded in various knowledge reservoirs, including rules and procedures, provided valuable knowledge for individuals as needed (Walsh and Ungson, 1991; Moorman and Miner, 1998; Wijnhoven, 1999). These mechanisms supported the communication process in the practices, which was argued to be the key point in ensuring that knowledge was shared. This became more noticeable after QOF, as it required all patient information to be stored in a database that was accessible to clinicians to help them deal with patients.

While there was an engagement in the formal procedures of storing and sharing knowledge through physical knowledge reservoirs, such as information system devices, practices also put strong emphasis on informal ways of sharing

264

knowledge. Most informants agreed that their practice embraced a 'blame-free' norm. Rather than blaming individuals, practices encouraged staff to learn from failures and mistakes to improve their performance in the future. Wijnhoven (1999) states that organisations may control people's norms and values through social networks, to enhance organisational memory.

Individuals were involved in various processes in the practices, regardless of their positions in the structure. The close relationship amongst individuals made the process of sharing knowledge easier, as they felt free to go and ask anybody competent in a particular issue. This strengthened the importance of relational reservoirs as knowledge reservoirs. In fact, nurses reported more of this type of relational knowledge reservoir than the GPs. The literature states that for nurses and other healthcare professionals, knowledge sourced from a relational reservoir is essential to perform their tasks (Argote and Ingram, 2000; Rulke, Zaheer and Anderson, 2000). In addition, the practices showed respect and appreciation of each other's expertise rather than the clinicians', this contributed to the memory enhancement through sharing and supported team-building.

Moreover, a noticeable characteristic found in all four practices was that most informants had long years of experience working in the same practice. They had relatively deep knowledge and understanding about the dynamics of their roles and also about their practice organisations. Long years of experience enabled them to have strong interaction with other practice members, which helped them to learn from each other. This aligned with the idea that social interaction enhanced the process of constructing new knowledge and bringing it to the unique organisational context (Appelbaum and Goransson, 1997; Gherardi and Nicolini, 2000).

It is clear from these narratives, that practices coordinated and managed the process of knowledge sharing by engaging in both formal ways, through rules/procedures, and informal ways through relational reservoirs and norms, which were highly supported by 'blame free' norms. These mechanisms were crucial in integrating various functions in the practices, and became more

important in ensuring that the process of knowledge sharing was taking place in the structure, with a high degree of specialisation. Thus, this finding support the hypothesis that *the higher degree of specialization a GP practice has, the more emphasis it places on rules and norms, to ensure knowledge sharing (H2).*

10.5.3. FINDING 3. FORMALISATION AND THE SIZE OF PRACTICES

As organisations grow in size and complexity, they tend to be more formalised (Pfeffer, 1982; Robbins, 1990).   As discussed formerly, GP practices have become more complex organisations. However, interestingly, the practices put more emphasis on informal norms than formal rules and procedures in controlling the behaviour of practice members.

The narratives collected from the interviews tended to concentrate heavily on norms and values in guiding practice staff social interactions, as well as supporting the process of learning from each other. Conforming to the discussions in previous sections, close relationships amongst individuals in the practices had been developed through years of working together, belong to the same community, and feelings of respect and appreciation toward each other's expertise and competence. This strengthened Wijnhoven's assertion that norms and values, as well as social network control can be used as a mechanism to help organisations manage the process of sharing knowledge and developing better organisational memory (Wijnhoven, 1999).

The four practices were categorised as large practice organisations. More specifically, practice B was the largest and the most complex one with more than 19,000 registered patients. While this was the case, in the all practices, there was no reported strong emphasis on rules and procedures as a way to formalise knowledge sharing and control the behaviour of the individuals.

Accordingly, it is apparent that the findings did not support the idea that *the larger a GP practice, the more formalisation to standardise behaviour there will be (H3)*. However, the practices' engagement in informal ways of managing

knowledge sharing and staff behaviour through norms and values, as well as utilising a relational reservoir, prove the idea that strongly held norms and values can be used as a substitute for the regulations, rules and procedures of a formalisation mechanism (Robbins, 1990). Yet, as this study did not measure the varying degree of norms and rules in formalising behaviour, this could be beneficial for further investigation.

10.5.4.   SUMMARY

This section discussed the findings with regard to the role of organisational structures on organisational memory and competence development. Significant changes in the practices' structure were discussed to show the whole picture of how QOF contributed to the change. More specifically, focus was given to specialisation and formalisation. While specialisation reflects differentiation in units and functions, formalisation referred to the ways in which an individual's behaviour can be governed through the use of rules, norms, or procedures. Within this context, various types of knowledge reservoirs were also discussed.

Various changes in practice structure were evident, including staff recruitment, the establishment of chronic disease clinics, work delegation and the appointment of clinical leads to manage functions within practice organisations. Moreover, the way practices assigned different functions into specialised units, divisions or departments showed the degree of specialisation in their organisational structures. More specialised unit arrangements, such as an IT division, particular chronic disease clinics, or competence-based job distributions, enhanced procedural memory development through enabling regular use of knowledge in a specific context, which led to competence building. In turn, such competence at particular functions or jobs made it possible for the practices to achieve their goals more efficiently. By assigning clinical leads, practices aimed to ensure that competent individuals dealt with relevant and specific clinical tasks.

While a high degree of specialisation existed in the structure, it was important for practices to ensure that knowledge embedded in their functions or units could also

be transferred to others, so that it could contribute to the development of organisation-wide competences. It is then crucial to ensure that knowledge was stored in ways that were accessible to other organisation members. Various knowledge reservoirs were used, including individual members of the organisation, information systems, policies and procedures and relational reservoirs. QOF contributed to increasing the importance of having a database management system as a knowledge reservoir and enabled clinicians and administrative staff to use and share relevant information, to help them in their jobs. Interestingly, such developments also marked up the emergence of different roles of "chaser" and "chased" in the practices. The system made its goal achievement process more transparent so that people could control each other in fulfilling QOF targets.

However, with a high degree of specialisation and various knowledge reservoirs, practices needed to ensure that the process of knowledge sharing was taking place. In doing so, practices engaged in different mechanisms to support this. Formalisation through rules and procedures was reported to exist. Yet, more emphasis was placed on the existence of norms and values in supporting the process of knowledge sharing and behaviour governing. Regardless of the size of the practice, it seemed that the extent of formalisation was less apparent in the practices.

Taking all the findings together, this study believes that organisational structure contributed strongly to the enhancement of organisational memory, which in turn led to better organisational competence. Thus, these findings support the second analytical proposition that *more structured and organised GP practices are better able to enhance their organisational memory and competencies to hit QOF targets.*

Table 25. Summary of Findings – Proposition 2

No.	Findings	References	Contribution of the study
1.	Engagement in various types of knowledge reservoirs	(Walsh and Ungson, 1991; Argote, 1999; Karsten, 1999; van der Bent, Paauwe and Williams, 1999; Feldman, 2000). (Beaulieu and Horrigan, 2005; Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; Huby et al., 2008; McDonald and Roland, 2009; Menachemi et al., 2009).	While previous studies focused on how individuals preserved the memory and the use of information systems in sharing knowledge, this study contributed to broaden perspectives that a practice was engaged in more than two reservoirs. Evidence shows practice engagement in different knowledge reservoirs including organisational routines, people, relational, information device/modes, artefacts, policies and procedures, structures, and norms and belief.
2.	Various mechanisms were used to ensure knowledge sharing taking place in organisation	(Zinn and Mor, 1998; Winjhoven, 1999; Argote, McEvily and Reagans, 2003; Aldrich, 2007; Fiedler and Welpe, 2010)	Although rules and procedures existed to manage knowledge sharing, there was more emphasis on the use of norms in managing behaviour.
3.	Practice size did not appear to increase the degree of formalisation	(Pfeffer, 1982; Robbins, 1990; Winjhoven, 1999)	The findings seemed to contradict the idea that larger size means more formalisation. This is due to the nature of norms in the practices which were gained through years of work experience, appreciation of others, as well as a 'blames free' culture.

10.6. ANALYTICAL PROPOSITION 3: COMPETENCE AND LEVELS OF CHANGE

Organisational change is a complex concept, which according to Wilson (1992) can only be understood from the perspective and through interpretation of individuals in organisations. On this ground, this study employed the informants' views and experiences as meaningful indicators for understanding the levels of changes undergone by GP practices after the introduction of QOF.

From the findings in Chapters 6, 7, 8 and 9, it can be seen that the practices conducted several changes or adjustments to various aspects of their organisation.

It is important to note that being a part of the UK national health care system, GP practices have to follow government rules and regulations. As stated early, government regulations became a point of departure for future planning. The QOF scheme, as a key feature in the *n*GMS contract, was considered as a new source of financing, and at the same time, as a tool to measure the performance of the practices. A practice's participation in the *n*GMS contract meant that in order to be rewarded financially, they had to follow QOF guidelines and achieve its targets. This process showed that changes happening in the practices involved political decision, in the way that the decision to participate was strategically driven by external government regulations; practices also considered the strategic implications of such participation on their existence and the sustainability of operations. QOF was reported to contribute to about 20-30% of the practices' income.

Interestingly, while they were bound to the same governmental directions and regulations, the way practices responded to the QOF scheme were relatively different from one to another. This was due to each practice's specific characteristics and competences, which had been built up over time. At this point, the idea of organisational memory and competence played an important part in determining which strategic directions the practices followed and how this would be done. This was shown in various aspects of the practice strategies.

Practices did become involved in strategic processes, including competence and resource constraints assessments, as well as environmental scanning. These processes were considered essential to ensure that the practices had the resources available to shape and pursue their strategic directions (Prahalad & Hamel, 1990, 1996; Barney, 1991; Parkin, 2009). Practices assessed their competence and the opportunities available for them in the market. Their competence served as a foundation to think about the expansion of services. Practices decided to expand services by offering new ones or opening more branches, after considering that they had the spare resources and expertise to do so.

Following their decision to participate in QOF, practices initiated several adjustments to their structures. This is in line with the idea that in order to ensure that all key chains of activities are arranged to support objective achievement, changes in strategy may require adjustment to the organisational structure (Chandler, 1962; Miles et al., 1978; Hardy, 1996; Morgan, 2006). In the cases of the four practices, clinical leads were assigned to be responsible for QOF activities in particular disease areas. While such assignments were based on a practice's assessment of the required competences; when practices did not have a competence, they decided to change their routines and pursue different path of competences in order to fill the gaps. To some extent, this finding did not correspond to the idea that the development of competence is path-dependent (David, 1997). This decision was understood as a response to ensure that practices managed to fulfil QOF targets as they brought considerable financial consequences. Again, this strengthens the notion of political interest in the decision making process, which represents an emergent change (Wilson, 1992).

Another notable change in organisational structure was the expansion in both the number of staff and the roles of healthcare professionals. To cope with the extra workload, practices recruited additional staff, especially nurses and HCAs. This was based on the need for relevant competences, as well as the potential cost effectiveness of such decisions. Moreover, with increasing the number of patients and QOF administrative work, clinicians reported delegation of routine clinical work to lower level healthcare professionals. This strengthened the evidence of previous research that the expansion of nurses' roles was due to the delegation of work (Leese, 2007; McDonald et al., 2007; Campbell, 2009; Grant et al., 2009). This also showed an increase in organisational memory capacity, as there was improvement in both the amount of resources and knowledge.

Informants also experienced an increased use of information technology to aid with the work. Practices installed a relevant information system to help with acquiring and storing patient information using templates and protocols. This system also served as a 'hub' to store information and share knowledge amongst

healthcare professionals in the practice. Previous studies also found that QOF increased the use of IT to help obtain patient data (Checkland, 2007; Grant et al., 2009; Checkland and Harrison, 2010).

In addition to the changes in strategy and structure, practices also experienced changes in operational levels. One of these changes was in human resource development, with more engagement in skills training and courses; furthermore, practices were also concerned with maintaining their quality of services, so that they ensured that delegation of work did not lead to a degradation in the quality. Thus, practices provided opportunities for nurses and HCAs to take part in skills training and courses to improve their competence, which in turn, expanded the practices' organisational memory capacity. This conforms to Appelbaum and Goransson (1997) who assert that staff development programmes may become the first point of departure to build the learning capability of organisations.

Another operational adjustment related to changes in working hours/days, in order to provide more access for patients who were unable to attend the clinics due to their busy schedules. Some practices also extended the length of consultation time to accommodate QOF-administrative work. However, in Practice C, the partnership decided not to extend the consultation time, but chose to recruit more staff to spread the workload.

These findings proved that organisations were responding to QOF by making adjustments in their strategies and structural arrangements. This conforms to the idea that in dealing with change, healthcare organisations may need to alter or fine-tune their strategy and structures (Koeck, 1998; Plsek and Greenhalgh, 2001).

Taken together, it can be seen that changes in the four practices took place at all levels and aspects of the organisations. Along with changes in organisational strategy and structure, practices also engaged in operational level changes. According to Wilson (1992), these characteristics reflect revolutionary transformation, where changes take place predominantly at the strategic level. It should be noted that the changes were made possible as practices possessed

competences in terms of the required skills and knowledge which built organisational memory. Hence, it appears that these findings support the third analytical proposition which is ***GP practices respond to QOF by pursuing strategic-level changes.***

Apart from this, it is interesting to note that informants maintained a considerable emphasis of 'no change' narratives in all four practices, despite the fact that there were observable changes in strategy, structure, IT systems and other operational levels. The reasoning behind this narrative can be referred back to the first analytical proposition, which supports that practices strongly addressed their routines in conducting changes as responses to QOF. The way practices adjusted to QOF was based on their existed competences or memory; chronic disease treatments, for example, were not entirely new for the practices.

Table 26. Summary of Findings – Proposition 3

No.	Findings	References	Contribution of the study
1.	Practices made changes in strategy	(Chandler, 1962; Barney, 1991; Hardy, 1996; David, 1997; Koeck, 1998; Plsek and Greenhalgh, 2001; Miles & Snow, 2003; Morgan, 2006; Checkland, 2007; Leese, 2007; McDonald et al., 2007; Campbell, 2009; Grant et al., 2009; Parkin, 2009)	• Practices pursued a different direction in their strategies. The engagement to set up chronic diseases clinics was one of them
2.	Practices made changes in structure		• Bigger team to cope with works / additional staff • Assigning clinical leads
3.	Practice made changes in the IT system		• Data/IT management system • Assigning specific people, units, or divisions for managing IT.
4.	Practices made changes at the operational level		• Staff development programmes • Changes in working hours and days • Adjustment in consultation times • Delegation of work

Prior to QOF, these activities existed, but were not managed as specific functions in the practices. In their study, Huby et al. (2008) asserted that practices failed to 'detect' changes in their organisations, as there were differences between the changes described by respondents and observed by the authors.

10.7. CONCLUSION

This chapter presented a discussion of the findings. The discussion was divided into 4 major parts. First, it focused on QOF and its impact on practices and discussed how informants perceived changes caused by QOF and QOF's consequences. QOF was perceived to be a guidance to standardise the behaviour and performance of practices and represented government control. Second, it provided an insight into how organisational memory related to the development of practice strategy. Third, it depicted structural changes in the practices, as well as the role of structure in enhancing competence and helping the practices to hit the QOF targets. Fourth, the discussion aimed to show various levels of changes, in order to determine the degree of change undergone by GP practices. In general, the findings provided support for all analytical propositions. While the study corresponds to evidence found in previous studies, some differences were also noted and discussed.

CHAPTER 11

CONCLUSION

11.1. INTRODUCTION

The previous chapter presented a discussion of the findings by comparing and contrasting them with the literature and previous studies. Some findings strengthened the existing literature and others offered different insights. Based on those findings, this chapter provides the contribution of the study to the knowledge as well as organisational and policy implications of the findings. The limitations of the study and recommendations for future research are also discussed.

11.2. CONTRIBUTION AND IMPLICATIONS OF THE STUDY

11.2.1. THEORETICAL CONTRIBUTION

This study contributes to the body of knowledge by proposing and testing a conceptual framework that explains the role of organisational memory as a core competence in exploring the phenomenon of organisational change. This framework provides a comprehensive understanding of the direction and level of organisational change through the perspective of organisational memory; it determines the influential relationship between organisational memory and core competence, and between organisational memory and an organisation's strategy and structure. Moreover, the study provides a valuable explanation of the role of organisational memory in building core competences in primary care settings.

This study contributes to the body of knowledge in the field of healthcare management by:

275

a) In the context of this study, there was only a small amount of research concerned with the issue of organisational memory and organisational change in the area of primary healthcare. Even less evidence was available in the context of P4P in general or QOF more specifically. Huby et al (2008) and Checkland and Harrison (2010) provide an insight into the organisational memory realm through an investigation of the effects of QOF on practice service delivery. The main conclusion of their findings was that individuals in the observed practices asserted that practice adaptation to QOF in their routine activities was relatively easy, as they had already been doing the same things. While the findings of this study strengthen previous research, they also offer a more comprehensive view of the realm of memory and change in the same context. The extension of the organisational memory literature, including knowledge reservoirs, the use of routines and its contribution to the development of organisational competence, brought significant implications to enriching theoretical perspectives in understanding organisational change, especially in the context of the highly regulated healthcare sector. This is important, as in such a context, the existence of primary care organisations is very much bound by the systems that are related to their dependences on government funding schemes.

b) While external stimuli are necessary for triggering the organisational taken-for-granted framework of reference (paradigm) to define their strategic direction based on organisational past and managerial experience, this research study provides empirical evidence that this is not always the case and such stimuli are not always the trigger for organisational change. This is because, an internal, self-reflexive learning process, which is more like evolutionary 'organic' growth, can shape organisational direction, in which organisations learn from their collective memory and are involved in how to utilise their organisational memory to enhance their competence to develop their strategy with less stress.

c) This study incorporated elements of organisational strategy and structure in understanding how organisational memory affected the change process. This was expected to bring a richer perspective to the field, as well as enabling further analysis on the level and direction of organisational changes. There was very little research incorporating level of change with both organisational memory and changes. The framework of the study contributes significantly to theoretical development in health care management, especially in understanding how organisational memory affects the formulation of organisational strategy and structure, which in turn enhances organisational memory to be a core competence. On the other hand, the study provides a valuable contribution to the understanding of the relationship between organisational strategy and structure and level of change.

All together, the study uses different perspectives to understand the phenomenon of organisational change and clarifies how changes to one organisational aspect potentially trigger other changes, creating a domino effect. The significance of this understanding becomes more substantial when it is associated with ideas about whether primary care practices should be categorised as 'organisations' or not.

11.2.2. ORGANISATIONAL IMPLICATIONS

Translating the findings into the realm of organisational systems and practices, relevant implications can be drawn.

a) The findings on how organisational memory, especially knowledge reservoirs, implies that GP practices were rich in embedded knowledge, possibly without recognising it. Knowledge was available and stored in different types of reservoirs, which were available for organisational members to use and reuse. More importantly, the findings showed that amongst different kind of knowledge reservoirs, organisation members stored rich knowledge on both the organisational content and its context.

277

Its importance became more significant when the practices considered expanding their knowledge capacity, which in turn, would contribute to the enhancement of competence, or development of new competences. The main difficulty attached to the knowledge reservoir lies in the fact that people stored both tacit and explicit knowledge. Unlike tacit knowledge, it is more possible to share explicit knowledge and transfer it to other people and to other knowledge reservoirs. The literature argues that the essential way to support the knowledge sharing process is through intensive communication and interaction between people working together. The findings of this study show that even in small organisations like GP practices, enhancing communication systems, through various uses of devices may be helpful to increase the possibility of knowledge sharing and transfer, especially with the high degree of specialisation in the structure.

b) The study found that practices were engaged in operational level and predominantly strategic level change through changes in strategy, structure and systems. It is interesting to note that while QOF was externally developed as a way to improve practices' performance in delivering services through incentive-based performance; its effects were more than expected. In order to fulfil QOF targets, practices invested more money in a variety of activities, such as recruitment, training, IT systems and facilities. As a consequence, most practices were able to prove that they were worth the money given, and were able to obtain high QOF scores. This caused the Government to elevate the threshold, to reflect the actual level of service, which led to another turn of the cycle. Practices invested more to ensure that they were able to obtain high QOF points through changes at different levels. This implies that practices were bound to this contract, not only because they needed the money, but also that they were already deeply engaged in investing in their own improvement, and they could not stop, as it would bring detrimental effects to the practice

performance and more importantly, to the quality of healthcare services for patients.

c) The QOF scheme was developed as a device to support evidence-based primary care practice. Thus, it was equipped with various tools to ensure that evidence was captured and could be used to find gaps between targets and actual performance. Despite the fact that the aim was to improve performance, the findings show that focuses on evidence gathering seemed to distract the attention of healthcare professionals away from patients. Intensive use of templates in data management during consultations created unintended consequences on the patient-clinician relationship and made the service less personalised, which strengthened evidence from many previous studies on QOF (Beaulieu and Horrigan, 2005; Fleetcroft et al., 2008; Maisey et al., 2008; Campbell, 2009; McDonald and Roland, 2009; Rodriguez et al., 2009).

Some practices reported making adjustments to consultation times. While this accommodated the time needed to fill in data, its effect on the dynamics of the patient-clinician relationship was not reported. Moreover, from the perspective of organisational memory, it was found that individuals retained their memory about patients and their situation which was notably helpful in maintaining personalised services. Yet, it became less possible to do this at the time due to the same reason. This implies the need for practices to find ways to tackle such consequences.

d) From the narratives, it was found that the existence of norms, values and social networks were more evidenced in controlling people's behaviour in sharing knowledge and information, which was then expected to enhance organisational memory. However, as practices grew bigger, changing the working environment, there might be some potential for changing dynamics in how people work in the practices. Therefore, it seems to be necessary for practices to formalise the way they engage in enhancing organisational memory capacity through developing organisational

279

memory policies. This policy is important to enable organisations to manage their OM more efficiently and effectively, and also, enable organisations to synergise different kind of memory as well as manage its reservoirs (Wijnhoven, 1999).

11.2.3. POLICY IMPLICATIONS

The findings of the study suggest three main implications for policy makers seeking to improve the quality of healthcare. The insights were based on informants' perceptions on QOF and how it affected the practices.

a) **Improvement toward Reliable and Valid Methods of Assessment**. QOF indicators were designed to assess both clinical and non clinical aspects of chronic disease care. They were centrally developed and uniformly imposed on primary care practices. This was useful as a way of standardising delivery of care, so that quality of care could be improved. Standardisation also made it possible for the Government to evaluate the performance of practices by comparing between them. This created competition, which was expected to lead to greater efforts in implementing QOF and pursuing good clinical care. A practice's compliance with QOF was essential, as it brought financial consequences.

On this matter, there were strong arguments from informants concerning the shifting priorities of practices to be more 'target oriented' or 'business-like'. Such concerns were related to the way patients were treated. Patients are human-beings and should not be treated as targets or numbers. While such cases were claimed not to take place in the practices, most informants expressed concerns about the potential consequences. This suggests that the Government might have to ensure that QOF does not drive practices away from their main priorities of delivering healthcare services to patients. In fact, the involvement of patient experience indicators could be an indispensable factor to potentially lessen this unintended consequence. The current patient experience assessment was perceived to be

scientifically flawed, as it did not capture reliable representations of all patients. Thus, the challenge would be to equip patient experience assessment with a reliable and valid method to collect and analyse data.

b) **Potential de-motivation factors.** This study found that there was some indication of de-motivation in the practices due to changes in indicators, as well as elevating the thresholds of QOF points. While the government considered these changes to be necessary to reflect improvement of healthcare standards, it was thought to be frustrating for practices as they needed to continually catch up with the new figures.

Informants revealed that since the first year of implementation, practices had been able to obtain high points beyond the thresholds. This was said to exceed the government expectations on practice performances and achievements. In fact, as noted in the literature, there were no proper feasibility studies to explore the practice performance baseline, so that when practices actually exceeded the upper threshold of targets, the Government needed to increase or move the goal posts, to better reflect the actual capabilities of practices. This implies that the Government needed to find better ways to measure practices' actual capability prior to implementing the policy, especially as it was intended to improve performance, because it might not hit the policy's aims as expected. Practices had proven themselves to be better than the government expected them to be.

The continuous adjustments required practices to make a greater effort to achieve the targets. This was seen to cause a sense of frustration, as the real financial gains for practices were not improved, if anything, they decreased. Even if the Government increased the money associated with one QOF point, the increased targets required more effort from practices to ensure that they could achieve the new targets. Recruitment and training staff, setting up IT systems, as well as building up supporting facilities were some of the investments that practices were reported to do. Taking

everything into account, practice investments seemed to outweigh the QOF money. Interestingly, practices could not do anything about it except continuously keep up with such changes.

Hence, this study believes that QOF is actually a positive lure or bait to draw practices' own efforts in improving their quality of services. While QOF money was seen to be 'fresh money' for practices, it pushed them to invest more, to show that they were worth it. This created a 'virtuous circle' of performance improvement efforts. Although this circle was externally driven, it became strategically embedded as part of the internal organisational activities, which were significantly reflected through the study's assessment of the relationship between a practice's competence and their levels of change. However, in the policy context, while this may lead to positive enforcement of quality improvement, the Government should be aware that there was an indication of de-motivation which requires them to ensure that adjustments to both targets and indicators are rewarding from the perspective of practices.

c) From the policy perspective, QOF was supposed to bring about performance improvement for practices and drive them to provide high quality of care through attaching incentive to performance. While practices did realise the main aims of QOF, this study also found that in its practical and implementation process, practices became more pragmatic and considered the importance of money in running organisations more. This was reflected through the narrative of 'income', 'business', 'target fulfilment', and 'QOF points', which together, provided a picture of how financial incentives had become the main concern for the sustainability of practices as a 'business entity', while at the same time, they tried to maintain their ethos as health care organisations. The literature also points out other perspectives in understanding the development of QOF. One of these was to control GP practices' performance by creating a 'market-like' competition through standardised indicators, in order to make one practice

comparable to another. Combining the practices' pragmatic perspective on money and the Government' intentions for QOF, it remains unknown whether these two fit together as expected or imply the need to amend and modify the policy on this particular scheme.

11.3. LIMITATIONS OF THE STUDY

This study had several limitations. In consideration of this, the findings need to be examined prudently.

a. While generalisation of findings is argued to be one of the limitations of conducting qualitative study (Murphy et al., 1998), it is not the intention of the case study to make statistical generalisations, but more to be an analytical one (Yin, 2009). Four large practices in non-deprived areas and working under the same PCT were involved in the study, each practice with its own characteristics. Hence, the findings might not be suitable to be used as generalised outcomes for other settings.

b. As this study aimed to explore organisational level change, the criteria of inclusion considered only those applicable to organisations. The study had 39 informants and their involvement was arranged through the practices. The internal processes of the practices were unknown to the researcher. With the aim of this research being to explore the change process through the perspective of organisational memory, the informants' understanding of such processes provided invaluable insights. However, as the researcher did not have any control over selecting informants, some of them appeared to be less knowledgeable about their practice's conditions due to their work experience in the practices. This implies the possibility of refining the criteria of inclusion, not only for organisations, but potentially for informants as well.

c. As the change process itself is argued to be a perceptive phenomenon that can only be explained through organisational members' accounts, there

were potential biases embedded in the individual perceptions. There was a possibility of respondent bias in the way that the responses given were filtered to reflect their own perspectives instead of an objective assessment of the situation. The researcher tried to eliminate such effects through cross-checking and triangulating informants' responses.

d. Practices were reported to have made some adjustments to accommodate the implications that dysfunctional consequences were indicated. The consequences included distractions to the dynamic of patient-clinician relationships and less personalised services, as patients were unable to see their choice of GP. However, whether this made any real impact and improvement to the dynamics of the relationship is still unknown. As this study relied on interviews as a primary data sources, the information might not be drawn out through the interviews, implying the need to incorporate intensive observation.

e. As stated formerly in both the Theoretical Review and the Findings, the discussion of organisational memory cannot be separated from the need to discuss knowledge reservoirs. The literature review found eight of them *(see page 262)* (Walsh and Ungson, 1991; Argote, 1999; Karsten, 1999; van der Bent, Paauwe and Williams, 1999), which were used as guidance to analyse the findings. It is possible that other reservoirs may exist which were not covered in this study.

f. The processes embedded in this study were carried out by the researcher alone. As noted by Mays and Pope (1995), this can lead to researcher bias. While various efforts were made to support the validity and reliability of the findings, through attaching related quotations that support arguments, and double-checking and cross-checking of primary and secondary data, there is a possibility that such bias still exists.

11.4. SUGGESTIONS/RECOMMENDATION FOR FUTURE RESEARCH

Relying on the discussion of the limitations of the study, there are several suggestions for future research.

a. Similar studies may need to consider developing inclusion criteria for informants, even if the study is intended to analyse at the organisational level. Future research might need to include patients' perceptions, as well as government perceptions (the PCTs) towards practices to see if they perceived any changes or not. Potentially, this leads to a better understanding of the context.

b. While this study included different types of knowledge reservoirs, some others might not have been addressed. To portray more exhaustive types of reservoirs, further studies should consider exploring a broader literature. Moreover, considering the importance of knowledge reservoirs in the discussion of organisational memory, it is suggested that a capacity comparison between each type of reservoir may provide a richer perspective in understanding it.

c. As this study did not measure the varying degree of norms and rules in formalising behaviour, this could be beneficial for further investigation.

d. This study focused on large-scale practices and found that these practices responded better to QOF and conducted changes at various levels, because they had their competences, which were built through their resources, including human resources. It would be interesting to find out how different sized practices reacted to QOF, even whether similar routines were portrayed or changes also took place at different organisational levels. It is suggested for future research to include different sizes of practices, to enrich findings in the field.

e. All of the GP practices involved in the study were from non-deprived areas and under the same PCT, which had its own financial situation and socio-demographic characteristics. It might be useful for future research to explore how practices from different socio-demographic backgrounds responded to QOF.

f. On the assumption that high QOF scores represented practices with a good performance level, which in turn have been able to cope and adjust to changes, this research included GP practices that had very high QOF scores and had maintained their scores for 4−5 years. Further research might be able to prove if a relationship exists between QOF scores as a performance indicator and the extent and direction of organisational change[21]. It might be useful also for future healthcare research to examine the relationship between level of performance and the role of organisational memory in change management in health care organisations.

g. Regarding the methodology used in the research, it is suggested combining interviews and observation would lead to capturing more comprehensive and richer information.

h. P4P programmes are widely used in both primary and secondary health care systems; future research might need to explore the impact of these programmes on the organisational memory, as well as the relationship between organisational memory and competence, and organisational strategy and structure in secondary health care settings.

i. Finally, future research will need to examine the factors that affect the construction of organisational memory in health care settings.

---

[21] In the literature, the relationship between QOF score and performance level of GPs is not yet clear; although some studies found a relationship between high QOF score and a good performance, other studies show inconsistent link (Downing et al.,2007; Kiran et al., 2010; Williams and Lusignan,2006).

APPENDICES

APPENDIX 1: PROTOCOL FOR SYSTEMATIC REVIEW

In conducting a systematic review, it is important to build a robust protocol. The protocol will ensure that transparency and consistency of methods is in place since the beginning of the study (Petticrew & Roberts, 2005). It also acts as guidance for other researchers to re-check and potentially replicate the study. The protocol will also lay strong foundation to assess any limitations for the review and enable researchers to conduct constructive revisions.

1.   FORMER SYSTEMATIC REVIEWS

The review started by investigating the existing systematic reviews of P4P in health sector. The following specialized databases have been searched:

1.   Centre of Review and Dissemination in the University of York. This can be accessed through www.crd.york.ac.uk/crd .
2.   The DARE Database (http://.york.ac.uk/inst/crd/crddatabase.htm)
3.   Cochrane Database of Systematic Review (www.nelh.nhs.uk/cochrane.asp)
4.   Campbell Collaboration (www.Campbellcollaboration.org) www.publichealth.nic.org.uk. , which includes details of systematic reviews in Public health.
5.   Effective Public Health practices website in Canada (http://www.city.hamilton.on.ca/PHCS/EPHPP/EPHPPResearch.asp)
6.   MDRC Database which includes USA government programs (http://www.mdrc.org)
7.   Research Evidence in Education library (http://eppi.ioe.ac.uk/reel)
8.   US Department of Education's Institute of Education Science (http://w-w-c.org

2.   CRITERIA FOR INCLUSION

This review employed several considerations to specify the fitness of studies that have been used for the review. The criteria for inclusion can be summarized as follow:

1.   **Language:** Only literature published in the English language was included.
2.   **Publication type:** Only empirical studies were reviewed.

3. **Setting:** Academic research, governmental studies related to Health Sector, especially in the context of Primary Health Care.
4. **Study Design:** All types of study designs and research methods were included.
5. **Period :** Papers published between 1970 and 2009.

3.   SEARCH STRATEGY

A broad search strategy was used to ensure the maximum number of published evidence was accessed.

3.1.   Electronic Databases.

The search covered databases in the following categories

1.   Health and Medicine--Health Sciences
2.   Social Sciences--Educational Studies
3.   Social Sciences--Health Economics
4.   Social Sciences--Management Studies

Specific emphasis was placed on the following databases.

1.   Health Management Information Consortium (HMIC) (OvidSP)
2.   HEED: Health Economic Evaluations Database
3.   Social Sciences Citation Index (ISI) on Web of Knowledge
4.   ERIC (CSA Illumina)
5.   ERIC (Dialog)
6.   Business Source Premier (EBSCO)
7.   MEDLINE (1950 onwards) (OvidSP)
8.   EMBASE (OvidSP)

3.2.   Identifying ongoing research.

This study checked the website of a range of agencies and ongoing and recent completed research projects funded by.

- ESRC (Economic & Social Research Council)
- National Health Service NHS
- National Research Register (NRR)
- Department of Health (DoH)
- National Audit Office (NAO)
- National Library for Health www.nelh.nhs.uk
- The European Community's Research & Development Information Search. www.cordis/eu/home.htm.
- UK Research Council http://www.reuk.ac.uk
- Centre of Economic Policy Research http://www.cep.org.ccepe/

- Centre for Evidence-Based Public Health Policy http://www.msoc-mvc.gla.ac.uk/evidence/evidence.html.

3.3. Keywords Used in Electronic Searching.

The following keywords have been used in the electronic databases: Pay for Performance, P4P, Pay for Quality, Performance Based Incentives, Merit Pay, Compensation & Performance, Value Based Purchasing, Quality and Outcomes Framework (QOF), health care, organisational change, competence(s), organisational competence(s) and organisational memory. Different strategies were devised for different databases as appropriate (i.e. Combine Searches).

3.4. Contact with Experts.

Experts working in this field were contacted in order to identify other studies relating to this review, which may have been missed by database searches or may not yet have been published for some reason.

3.5. Reference Scanning.

In this study additional relevant publications found in reference lists of the selected articles were reviewed.

3.6. References Management

The names of the available database, the keywords and the results, were all recorded in a Search Diary. The Endnote program was used to sorting titles, abstracts and full texts at the availability of a complete e-version of studies.

3.7. Information Extraction

The substantive and methodological features of each study were coded by using questionnaires designed to identify information on key features of interest, study aims, research design (method used and research sample), analysis conducted and conclusions, and implications. To do this in a systematic manner, paper forms have been used to record information.

APPENDIX 2: DESCRIPTION OF THE STUDIES

Distribution of Studies by Context
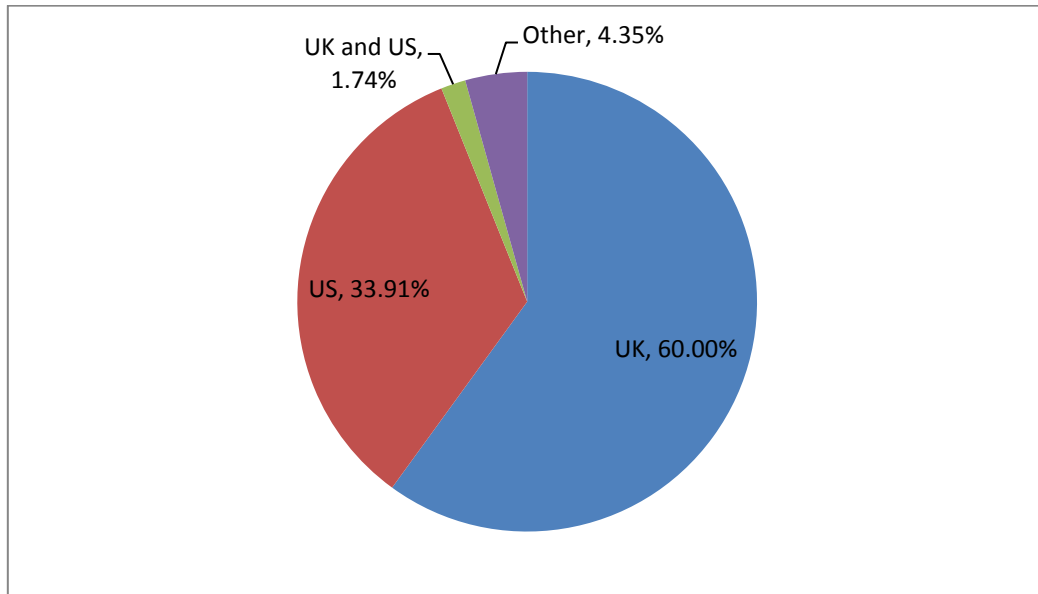
Distribution of Studies by Year of Publication
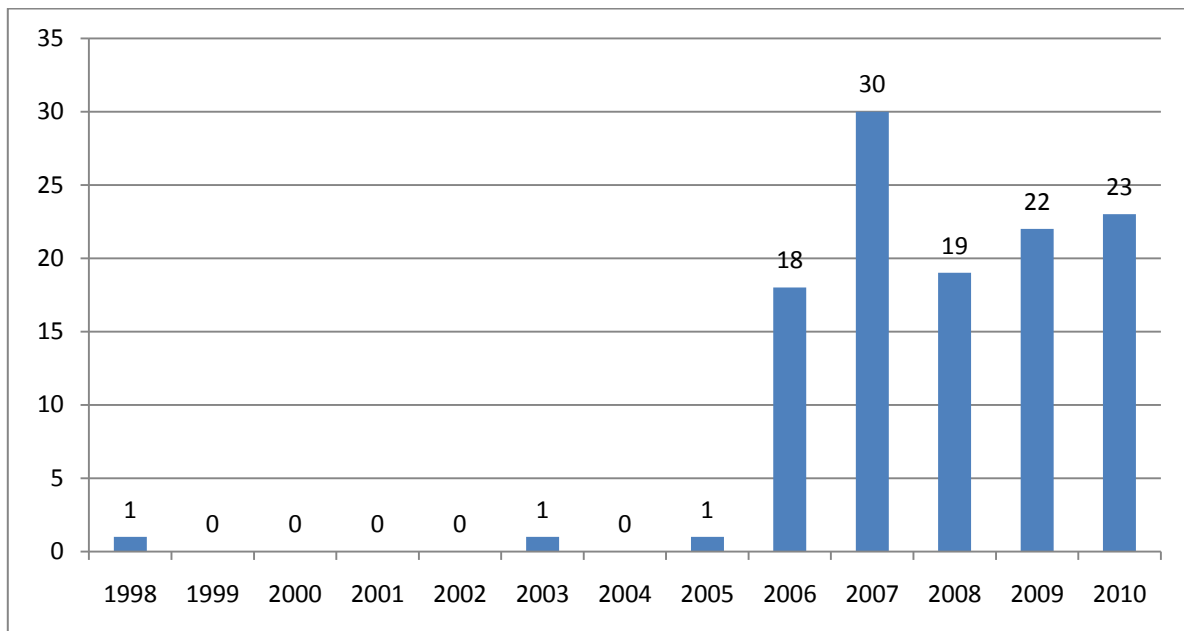
Distribution of Studies by P4P Programmes

Combined (QOF and others) 1.74%

Others 37.39%

QOF 60.87%
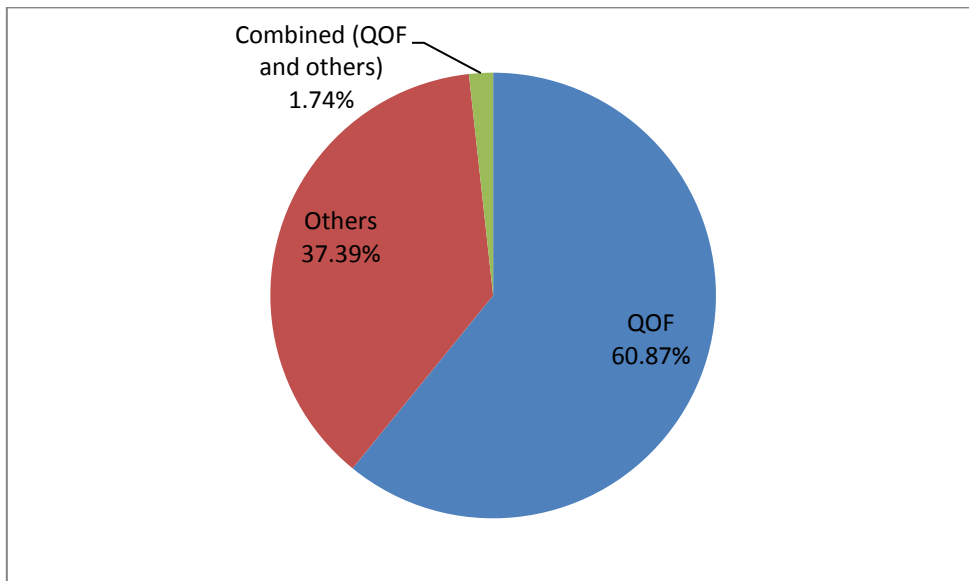
Note:

The number of study using QOF is larger (60.87%) than UK setting based (60.00%), as there was one study conducted in Australia by Elliot-Smith and Morgan (2010) used QOF as a benchmark for assessing GP practice performance in Australia.

Distribution of Studies by Research Method

Both 4.35%

Qualitative 19.13%

Quantitative 76.52%
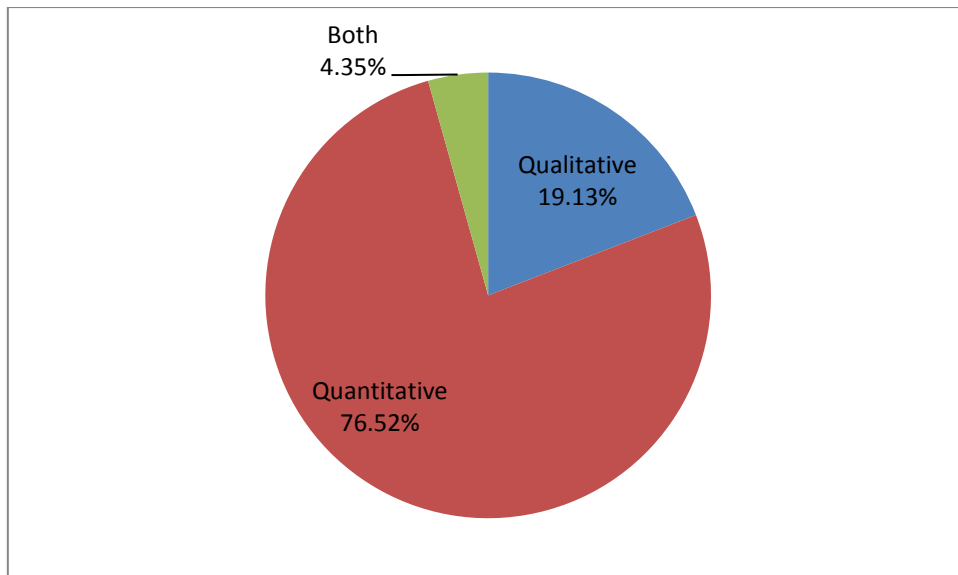
Unit of Analysis used in the Studies

data unclear
8.70%

Both
2.61%

Individual
26.09%

group /
organisation
62.61%
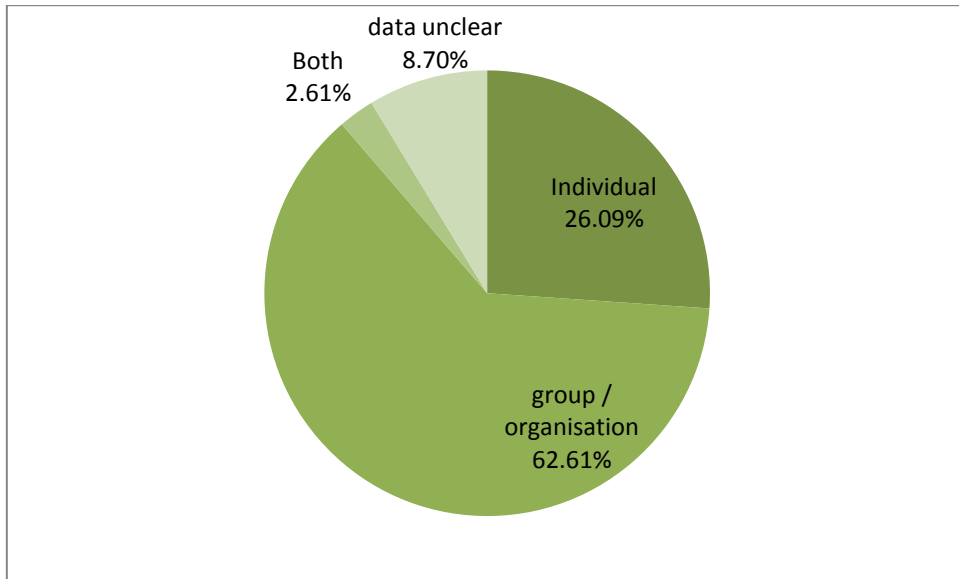
DESCRIPTIONS OF P4P PROGRAMMES INCLUDED IN THE STUDIES

Measures Used to Evaluate the Impact of P4P Programmes
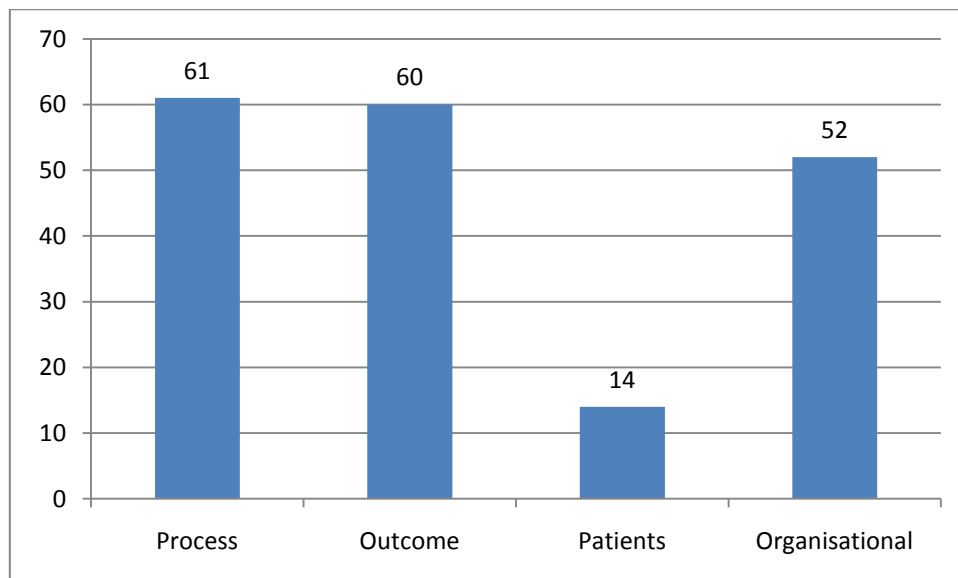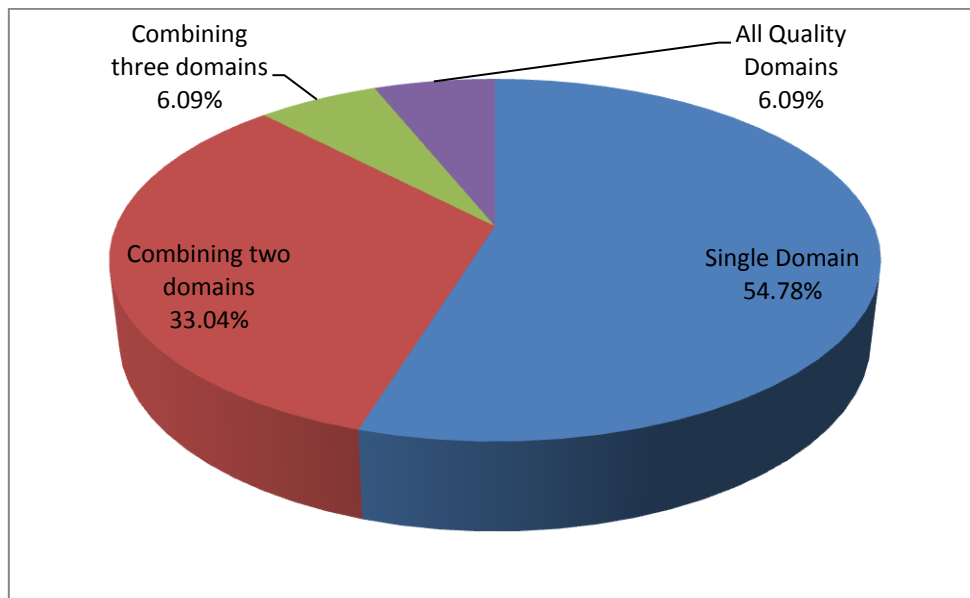
Thresholds of P4P programmes

Data not clear 10.43%
Relative 2.61%
Both 0.87%
Absolute 86.09%

Target of P4P Programmes

Both 0.87%
data unclear 8.70%
Individual 24.35%
group / organisation 66.09%
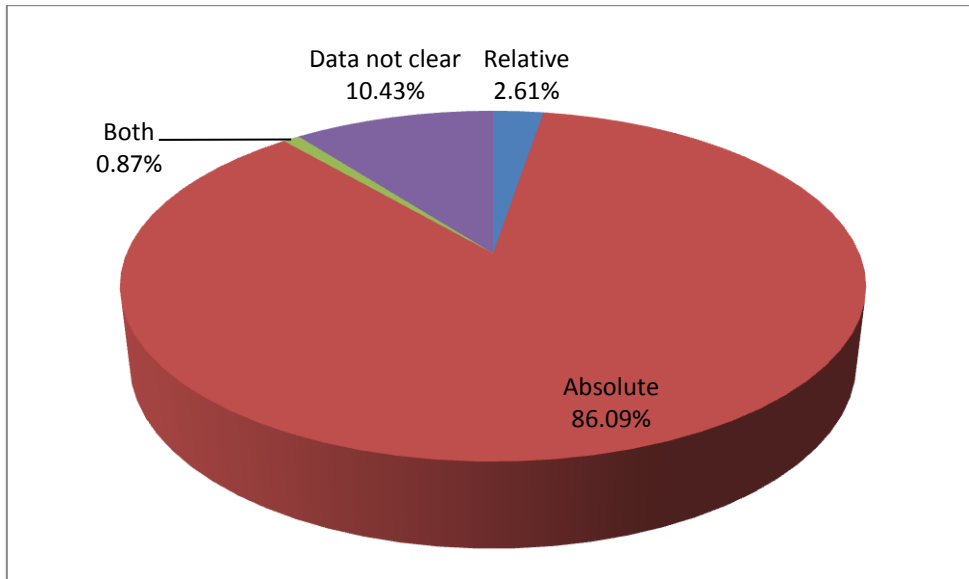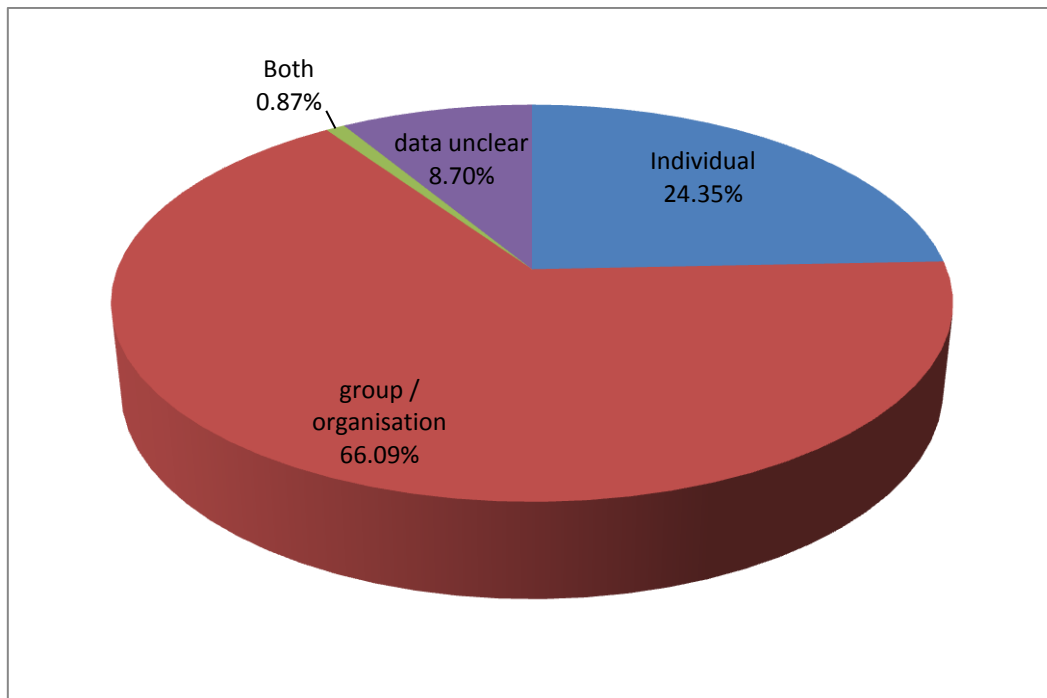
APPENDIX 3: INTERVIEW GUIDELINE

Investigator:
Mohammad Alyahya

Research Title:
Exploring the Organisational Impact of the NHS Quality and Outcomes Framework (QOF) in GP Practices.

Introduction
- **Research Background and Aim:**
  o In April 2004, the UK government launched the Quality and Outcomes Framework (QOF), according to this new scheme part of a GP practice's income links to their performance level in four quality domains.
  o This research aims to explore the impact of QOF on GP practices.
  o The interview will focus on the impact of QOF in terms of changing organisational strategies, structures, norms and values in GP practices.
- **Assurance of Ethical Conduct**
  o All information will be treated confidentiality.
  o Respondents' names will not be revealed in any part of the report.

Themes and Issues for Interview

- **Brief background about Respondents' job.**

  o How long have you been working in this organisation (and in others previously)?

  o If the respondent is a GP: Are you salaried or partner GP? How long have been working as a GP?

  o What kind of jobs do you do?

- **Respondents' view about the impact of QOF on GP practice's:**

  o Organisational memory and core competence(s)

  o Organisational strategy

  o Level of change

  o Direction of change

  o Structure/ job design, job responsibilities, and decision making.

  o Organisational values, norms and identity.

Note: For the Organisational memory and competence(s), no direct questions were asked. Instead, indirect questions were asked under each theme, and information extracted from answers of each other themes.

Below are different questions for each theme, these questions were developed and emerged case by case. As the researcher's understanding of the field developed, so did the lines of inquiry.

The interviews had an open discussion format and the questions were used as guidance and to help those who could not understand the management issues in their practice. The questions were asked of each interviewee depending on: The position and experience of the interviewee, how long he/she had been working in the practice, and the order of the interview.

Interview Guideline

Main theme	Theories Behind the theme
Organisational strategies	Could you please tell me about the practice strategy? Do you know the practice's vision, targets/objectives? What would this practice like to achieve or to become in the next future (five years)?
	Do you have a business plan? Do you consider QOF in your plan? If so, how?
	Who in the practice and how does the practice set plans and according to what and why?
	Are you aware of things that they considered when they set the practice plans? Why do you think they considered such things?
Organisational change	When QOF came in 2004, as far as you remember, what did the practice do to accommodate the implementation of QOF? What did the practice do to achieve QOF targets?
	Do you recognise any changes that have happened since 2004? Tell me about these changes? Do you think that QOF was behind these changes? Why?
	Do you think there are differences in the way the practice was run or managed before and after QOF?
Organisational structure	Tell me about the structure of this practice? Who is responsible to whom? Who reports to whom? How is the job assigned and distributed?
	Tell me about your Job responsibilities, role? Do you have any work related to QOF? Have your job responsibilities increased in the last 5 or 6 years and why?
	After QOF, did the practice arrange or re-arrange the job responsibilities or roles among the staff?
	How is decision making, either clinical or administrative, done in the

Main theme	Theories Behind the theme
	practice? How did this change after the QOF and Why?
	How does the practice manage to control the accomplishment of clinical V.S administrative duties?
Values, norms, and identity	Tell me about the values and norms of the practice. Tell me about the identity of the practice.
	How do the values of the practice affect you doing your job?
	What are the main characteristics of this practice? How can you differentiate this practice from other practices? In your opinion do you think people of the practice are aware of these characteristics and patients as well? Do you perceive any changes in the practice norms and values because of QOF?
	Do you think patients' perception towards the practice has changed in the last 5 or 6 years? In your opinion do you think that was because of QOF? Why? How and Why has QOF changed your perception/your colleagues towards the practice?

These questions were developed based on empirical evidence of QOF, theory of organisational change and memory and on scientific common sense. The following table summarises the theories behind the question development:

Interview's Question Development

Main theme	Main Theories Behind the theme
Organisational memory	O.M is considered as a key factor in constituting organisational competences (Winjhoven, 1999; Drejer, 2000; Drejer & Riis, 2000; Drejer, 2001). Individuals and organisations learn and remember what they have learnt (episodic memory) and this helps them to articulate and draw their future (van der Bent, Paauwe and Williams, 1999; Rowlinson et al., 2010). In GP practices people served as repository of knowledge or memory. They contributed to the development of 'stories' in organisation (Checkland, 2007; Huby et al., 2008; McDonald et al., 2008; Checkland and Harrison, 2010).
Organisational strategies	Organisations might pursue unprompted strategic direction in order to respond to changes from external environment (Mintzberg, 1978; Shortell, Morrison and Robbins, 1985; Shortell & Kaluzny, 2006). Organisational capability resides with O.M. which in turn constitutes the competences (Nelson & Winter, 1982; Winter, 2003).

Main theme	Main Theories Behind the theme
	QOF has encouraged the practices to be business-like investment (Bokhour et al., 2006; Roland et al., 2006; Sutton, Ikenwilo and Skatun, 2007; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Menachemi et al., 2009; Checkland and Harrison, 2010).
Level of change	Evolutionary and/or transformational change takes place on the strategic level and then implemented in all organisational level (Wilson, 1992). QOF has encouraged GPs to enlarge their capacities and expand their services by establishing new clinics (Edwards and Neal, 2008).
Direction of change	In order to achieve objectives, organisations need to direct their strategic orientation to what they are competent in (Aimé, 1997; Prahalad & Hamel, 2006). Core competences determine organisational strategic direction (Prahalad & Hamel, 1990, 1996; Barney, 1996, 2001). QOF as a new government payment system is considered as a mechanism of change (Campbell, McDonald and Lester, 2008; Huby et al., 2008; Damberg, Raube and Teleki, 2009; Checkland and Harrison, 2010). GPs practices readiness for change: Practices equipped themselves for the implementation of QOF by incentivising and training staff (Beaulieu and Horrigan, 2005; Bokhour et al., 2006; Casalino et al., 2007; McDonald et al., 2007; Locke and Srinivasan, 2008; Whalley, Hugh and Sibbald, 2008; Grant et al., 2009).
Organisational structure	Strategic level changes might need structural adjusting including differentiating and specialising in certain aspects (Koeck, 1998; Plsek and Greenhalgh, 2001). Organisational structure built through dynamic processes which blend historical force and management decisions, as a part of a broader process of O.M creating (Walsh and Ungson, 1991). Expansion in GPs services has followed by: Re-stratification of roles between healthcare professionals. Increasing admin and clinical staff work load and responsibilities. Recruiting more staff, especially nurses and HCAs and creating additional positions to accommodate establishment of IT system. Few people, mainly partner GPs, who take the decisions, and creating multi-disciplinary teams led by a GP (Roland et al., 2006; Leese, 2007; Huby et al., 2008; Maisey et al., 2008; Damberg, Raube and Teleki, 2009; Gemmell et al., 2009; Grant et al., 2009; McDonald et al., 2009; Menachemi et al., 2009; Checkland and Harrison, 2010).
Values, norms and identity	Meta-memory represents the values, norms, and quality information about the substantive memory; which is called Memory of Memory (Wijnhoven, 1999).

Main theme	Main Theories Behind the theme
	Norms and values play a key role in maximising knowledge sharing within the organisations (Wijnhoven, 1999).
	While identity is important to support change, organisation needs to be able to pursue organisational change to preserve its identity (Gagliardi, 1986; Dutton and Dukerich, 1991; Hatch & Schultz, 2004).
	As an identity developed through embodied history, O.M shapes organisational identity (Weick, 1979; Stein, 1995; Stein and Zwass, 1995).
	The integration and alignment between memory, norms, and organisational identity in dealing with change nourish the O.M, and which in turn supports developing organisational competences (Wijnhoven, 1999; Gumport, 2000; Tsai, Lin and Chen, 2010)
	QOF encouraged knowledge sharing within the practices (Beaulieu and Horrigan, 2005; Checkland, McDonald and Harrison, 2007; Campbell, McDonald and Lester, 2008; McDonald et al., 2009).

APPENDIX 4: ETHICAL CONSIDERATION

There are increasingly debates amongst researchers over the ethical dilemmas in conducting research (Easterby-Smith et al., 1991). In order to lessen the friction caused by ethical issues, researchers need to make explicit statements to alert people involved in the research that they may be exposed to the issues.

Two ethical issues frequently challenge researchers in organisational studies (Easterby-Smith et al., 1991). The first is the use of participant observation research methods, in which participants are involved as observers of other participants. The question of ethics refers to the conflicting roles played by participants. A study might not be able to eliminate the bias or deception from participants as observer. The other issue is about control and use of data by researchers. The researcher must be responsible for handling and taking care of the collected data, including how to transcribe it. For that purpose, this research undertook some strategies to deal with ethical concerns.

The first strategy was to obtain ethical approval from both the University of York and NHS Ethics Committees. According to NHS regulations, all research conducted in health organisations needs to obtain Ethics and Research Governance Approval before starting data collection. Prior to the data collection process, a research proposal, ethics forms and other required documents were submitted to both the Humanities and Social Science Ethics Committee (HSSEC) at the University of York and NHS Ethics Committee. The supporting documents included 1) a covering letter giving brief information on what the research was about; 2) a consent form to ensure through written proof that all data and information would be treated anonymously and the involvement of respondents in this research remained voluntarily, and 3) a participant information sheet which contained an introduction, purpose of this study, emphasis on voluntary participation, the possible benefit of the research, the possible risks which might threat the participants, and the time needed for contribution to the study. After making minor corrections to the

information sheet and consent form, the research was approved by both HSSEC and NHS committees.

The second strategy involved the data treatment mechanism. To assure the confidentiality of all informants regarding the information given to researcher, it was treated anonymously. Moreover, the names of the people taking part in the research and any other information that could have identified them did not appear in any research process that followed. This mechanism limited the chance of prejudice over any units of analysis, either individuals or organisational.

Third, in order to ensure the security of information required in this research, effort was made to protect all written documents, recorded interviews and transcriptions of interviews by storing them in a lockable cabinet, with access available only to the principal researcher and his supervisors. According to the rules and regulations of The University of York personal data will be stored for 5 years. This is to allow for re-checking data and information, especially when the work is to be published. However, data will be stored at the University of York under the previously described conditions.

Centre for Health and Public Service Management
The York Management School
Sally Baldwin Buildings, Block B
University of York
Heslington, York YO10 5DD

Invitation letter

Version: 2 (04/06/2009)

Tel	+44 (0) 1904 433431
Email	ma548@york.ac.uk

Date: /   /

Dear Sir/Madam

Assessing the Organisational Impact of the NHS Quality and Outcomes Framework (QOF) in GP Practices

Reference number:

We are carrying out a research to explore the impact of QOF in GP practices, with particular emphasis on *How* and *Why* GP practices have altered their behaviour following QOF implementation. We would be very grateful if you could take part in this study. Before you decide, it is important to understand why the research is being undertaken and what we intend to do. Please take the time to read the information on the following pages carefully.

If you are interested in taking part in the study then (you need to fill the reply slip and return it back in the provided envelope). Remember that you do not have to participate in this study. Furthermore, you would be free to leave the study at any time and there would be no need for you to give a reason.

We very much appreciate your help with this research and believe that you and your colleagues can provide a valuable perspective on this important topic. If you have any queries, or questions, please do not hesitate to contact me. If you provide your contact details then we will only be too happy to send you a summary of the findings of the study. However, please be assured that this study is confidential and all information that we receive will be *anonymised* with no comments or responses attributed to any specific individual or organisation.

Yours Sincerely,

Mohammad Alyahya

THE UNIVERSITY *of York*

Participants Information Sheet	**Centre for Health and Public Service Management**
	The York Management School
	Sally Baldwin Buildings, Block B
	University of York
	Heslington, York YO10 5DD

Version 3 (14/08/2009)

Tel +44 (0) 1904 433431

Ref. Number: 09/H1311/67

Email ma548@york.ac.uk

Assessing the Organisational Impact of the NHS Quality and Outcomes Framework (QOF) in GP Practices.

Chief Investigator: Mohammad Alyahya

You are invited to take part in a research study which is being conducted as a part of a PhD degree at The University of York. We appreciate your participation which we believe will greatly enhance the findings of this study.

Before you decide whether or not to take part, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully. Please ask us if there is anything that is not clear or if you would like more information.

What is the purpose of the research?

The NHS Quality and Outcomes Framework (QOF) is a Payment for Performance (P4P) system that uses financial incentives to incentivise General Practitioners who meet specified quality targets. Evidence from previous research, particularly in the USA, shows that financial incentives can improve the performance of healthcare providers. Whilst financial incentives have been reported to improve performance and influence behaviour in beneficial ways, the impact of such rewards has been shown to generate a range of unintended and dysfunctional consequences for staff and patients.

The aim of this study is to explore the impact of QOF on changing organisational strategies, structures, cultures, and behaviour in GP practices.

Why have I been chosen?

You are being asked to participate as we are recruiting General Practitioners, nurses, health administrators, and senior staff who are working in large GP practices and PCTs. We aim to recruit around 40 people for the study, between 10 and 15 people from three practices.

Is participation voluntary?

Yes, participation is entirely voluntary. You are free to withdraw from the research at any time without giving a reason and without any detriment to yourself or your organisation.

What does taking part involve?

If you decide to take part in the research, you will be interviewed. The semi-structured interview will take a maximum of one hour, and with your permission, will be audiotaped.

Before we start the interview, you will be given an opportunity to ask questions and sign a written consent form confirming that you would be happy to take part in the study.

What is the likely benefit to me?

Although there may be no direct benefit to you for participating in this study, it is expected that the findings will help to reach a better understanding about the financial rewards and performance management systems that could be useful in setting health policies and improving the performance of health providers.

What is the possible risk or inconvenience to me?

There are no risks attached to this study. Your interview scripts will be kept strictly confidential; available only to the researcher and his supervisor (Dr. Russell Mannion). The only tangible cost to the participant will be the inconvenience derived from the time required to attend for interview.

What will happen to the information you provide?

Interview tapes will be transcribed. All tapes and transcriptions will be locked in a safe place. All information collected during the course of the study will only be viewed by the research panel committee, and remain strictly confidential.

At the end of the study this information will be used to write up a PhD thesis, publishing articles in professional and academic journals and conference presentations.

The reports, publications and presentations will include summaries and anonymised quotations from some interviews. However, the name of the people who have taken part in the research or any other information that could identify them will not appear in the thesis or in other written forms when the study is completed.

All who take part in the research will be sent a summary of the final report.

When the study is completed, all the information will be kept in locked filing cabinet in a storeroom of the York Management School, University of York for 5 years and will be destroyed after that time.

What is the next step?

If you are willing to participate in the study, please complete the reply slip and return in the provided envelope. We will contact you after receiving your reply slip to arrange the date and time of the interview. A consent form can be signed on the day of interview. The consent form will not be used to identify you. It will be filed separately from all the other information. However, you may keep this sheet for reference.

Further Information:

If you have any concerns or questions about this study, please feel free to contact the principal investigator, Mr Mohammad Alyahay, on 01904 433431 or e-mail ma548@york.ac.uk.

Centre for Health and Public Service Management
The York Management School
Sally Baldwin Buildings, Block B
University of York
Heslington, York YO10 5DD

CONSENT FORM

Version6 (14/08/09)

Tel	+44 (0) 1904 433431
Email	ma548@york.ac.uk

Assessing the Organisational Impact of the NHS Quality and Outcomes Framework (QOF) in GP Practices

Investigator   : Mohammad Al-Yahya

		Please tick each box
1.	I confirm that I have read and understand clearly the information sheet for this research and have had the opportunity to ask questions about the study	
2.	I understand that my participation in this study is voluntary and I am free to withdraw from the research at any time without giving any reason and without any detriment to myself and my organisation	
3.	I agree to participate in this study	
4.	I understand that the interview will be audio-taped	
5.	I understand that only the members of the research team have access to the information collected during the study	
6.	I am aware that the information collected during the interview will be used to write up a PhD thesis, as well as journal articles and books	
7.	I understand that information collected during the course of the research project will be treated as confidential. This means that my name, or any other information that could identify me, will not be included in anything written as a result of the research	
8.	I am aware that some information collected during the study will be used in anonymised quotations. This means that the researcher will quote some parts of the interviews and use them in the thesis or in other written forms without revealing the names or any information that identify the participants.	
9.	I understand that when this research is completed the information obtained will be retained in locked filing cabinets in a storeroom in the Department of Management, University of York for 5 years and then will be destroyed	

Name of Participant	Date	Signature
Name of Researcher	Date	Signature

National Research Ethics Service

York Research Ethics Committee

Learning and Research Centre
York Hospital
Wigginton Road
York
YO31 8HE

Telephone: 01904 725125
Facsimile: 01904 731297

24 August 2009

Mr. Mohammad Alyahya
PhD Student
Sally Baldwin Buildings, Block A
The York Management School
University of York
YO10 5DD

Dear Mr. Alyahya

Study Title:	**Assessing the Organisational Impact of the NHS Quality and Outcomes Framework (QOF) in GP Practices.**
REC reference number:	09/H1311/67
Protocol number:	6

Thank you for your letter of 14 August 2009, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair. The Chair has asked me to highlight that it would be best practice to ask participants to initial the boxes on the consent form rather than just ticking as currently requested.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk

This Research Ethics Committee is an advisory committee to Yorkshire and The Humber Strategic Health Authority

The National Research Ethics Service (NRES) represents the NRES Directorate within The National Patient Safety Agency and Research Ethics Committees in England

Where the only involvement of the NHS organisation is as a Participant Identification Centre, management permission for research is not required but the R&D office should be notified of the study. Guidance should be sought from the R&D office where necessary.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Letter of invitation to participant	2	04 June 2009
Interview Schedules/Topic Guides	2	
Compensation Arrangements		04 June 2009
Letter from Sponsor		04 June 2009
Covering Letter		
Protocol	6	15 June 2009
Investigator CV		
REC application	20146/47775/1/127	29 June 2009
Summary Flowchart		
Academic Supervisor - Russell Mannion CV		
Participant Information Sheet	3	14 August 2009
Participant Consent Form	6	14 August 2009
Reply Slip for possible participation	1	05 June 2009
Response to Request for Further Information		14 August 2009

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

09/H1311/67	Please quote this number on all correspondence

Yours sincerely

Mrs Alison Booth
Chair

York Hospitals NHS

NHS Foundation Trust

R&D Unit reference: NYY-P01447

27th October 2009

Mr Mohammad Alyahya
Sally Baldwin Buildings Block A
The York Management School
University of York
York YO10 5DD

North and East Yorkshire Alliance R&D Unit

Main Office: Learning and Research Centre
York Hospitals NHS Foundation Trust
York
YO31 8HE

Tel: (01904) 726996
Fax: (01904) 731297

www.northyorksresearch.nhs.uk

Dear Dr Alyahya

NHS Permission to undertake a research study

Trust: North Yorkshire and York PCT
Study Title: The Impact of the Quality and Outcomes Framework (QOF) in GP Practices

Thank you for submitting details of this study for NHS Permission from the above-named Trust, which is a member of the North and East Yorkshire R&D Alliance.

I confirm that the study has NHS Permission and can now begin in the Trust.
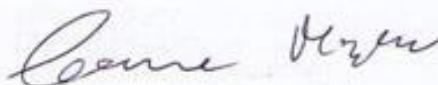
Please note that the study must be conducted in accordance with the approved protocol, the Department of Health Research Governance Framework for Health and Social Care and any applicable legislation.

Please check that you are aware of the sponsor's Standard Operating Procedures that are applicable to this study. If your study is sponsored by the Trust, please refer to the Standard Operating Procedures published on the Unit's website www.northyorksresearch.nhs.uk. These should also be used as a default for externally sponsored studies where the sponsor does not have its own procedure or where there are gaps in the sponsor's procedure due to local circumstances.

Please ensure that you notify me if there are any amendments to the study or when the study has ended and send me details of any publications that result from it.

May I wish you every success with the study.

Yours sincerely

Caroline Mozley
Head of Research and Development
On behalf of North Yorkshire and York PCT

The R&D Service for: East Riding of Yorkshire Primary Care Trust   Harrogate and District NHS Foundation Trust
Hull Teaching Primary Care Trust   North Yorkshire and York Primary Care Trust
Scarborough and N. E. Yorks Health Care Trust   York Hospital NHS Foundation Trust

APPENDIX 5: RELATED PUBLICATIONS

Mohammad AlYahya, Matthias Beck (2011). General practice after the introduction of the QOF. *British Journal of Healthcare Management,* 17(8): 345 - 352 (Aug 2011).

General practice after the introduction of the QOF

Mohammad Al Yahya and Matthias Beck

ABSTRACT

While the Quality and Outcomes Framework (QOF) is reported to improve performance, its impact on some aspects of organisations need to be explored given the increased reliance on such schemes. Organisational culture can be seen as providing a sense of common values, belief, and norms, which may act as guidelines for behaviour in organisational settings. This research employs a competing value framework depictures different types of culture based on specific focuses and processes. The study is based on interviews with 2 GP practices in the north of England involving 19 participants. Healthcare professionals were aware that there is a dominant value held and shared strongly among members of the organisations—to provide high quality patient-centred services. This study found that while clan culture is still strong in both practices, changes occured in respondents' culture after the implementation of the QOF.

The Quality and Outcomes Framework (QOF), a payment for performance (P4P) system, uses financial incentives to motivate GPs to meet specified quality targets (Mannion and Davies, 2008; McDonald and Roland, 2009). QOF represents a significant proportion of public expenditure and costs the UK economy approximately £1 billion annually (Campbell et al, 2008). GPs can increase their income by up to 25% annually depending on their performance as measured along 134 predefined quality indicators. The quality metrics are classified in four domains, namely clinical care, organisational, patient's experience, and additional services domains (Roland, 2004; The NHS Information Centre, 2006). Practices are able to claim points in relation to their performance in those domains, and these points are then translated into financial rewards.

Previous research indicates that financial incentives can improve the performance of healthcare providers and change their medical behaviour (Cutler et al, 2007; Tahrani et al, 2007; Cupples et al, 2008; Falaschetti et al, 2009). Moreover, an appropriate financial reward system is critical to influence organisational culture during change, in a sense that reward has power to shape behaviour of people in organisations (Kerr and Slocum, 1987). Culture as a key organisational

aspect potentially contributes to the successfulness and the performance of organisations (Kerr and Slocum, 1987; Burke and Litwin, 2008). In healthcare organisations, culture and performance are created together in a 'mutual reinforcing manner', depending on wider contexts and reflecting a complex link of various aspects (Scott et al, 2003).

Most previous research on the QOF scheme has used quantitative methods and focused primarily on elucidating association between QOF effectiveness and practice characteristics (Doran et al, 2006; Guthrie et al, 2006; Wright et al, 2006; Ashworth et al, 2007), and its effect on service quality (Tahrani et al, 2007). There is, however, comparatively little evidence on the impact of QOF on organisational behaviour in GP practices—particularly organisational culture.

Against this background, this study aims to improve evidence base in relation to the QOF programme and to contribute to an improved understanding of factors which influence organisational culture within GP practices. This paper starts by providing a brief literature review on organisational culture as a foundation for understanding the dynamics of organisational culture and the context of pay for performance in the UK.

Mohammad Al Yahya is a PhD student at The York Management School The University of York and Matthias Beck is a Research Director, Head of Public Sector Management Group The York, Management School The University of Yor

Email: ma548@york.ac.uk

26

Organisational culture

Apart from countless scholarly works trying to define 'culture', scholars view culture from different angles resulting in diverse ways of explaining culture and aspects of it (Pfeffer, 1997; Alvesson, 2002). Kunda (1992) asserts that culture governs behaviour of individuals as members of organisations by way of shared meanings, assumptions, norms, and values. Similarly, O'Reilly and Chatman (1996) define organisational culture as 'a system of shared values (that define what is important) and norms that define appropriate attitudes and behaviours for organisational members (how to feel and behave)'. This definition is shared by Watson (2002) who asserts that it is important to know how people evaluate the rightfulness of their action when dealing with organisations. By this, culture can be seen as a way to 'control' behaviour of people in organisations. Meanwhile, Schein (2010) adds the aspects of external and internal environment, and suggests that culture is learned through dynamics of interaction of 'external adaptation and internal integration'. He asserts that culture is 'invented, discovered, or developed' in ,and by, groups of people (Schein, 1990). Schein emphasises that culture is 'learned' and may act as a 'framework' for guiding members of organisations in dealing with their problems. He agrees that culture can be reflected through the way individuals behave in organisations.
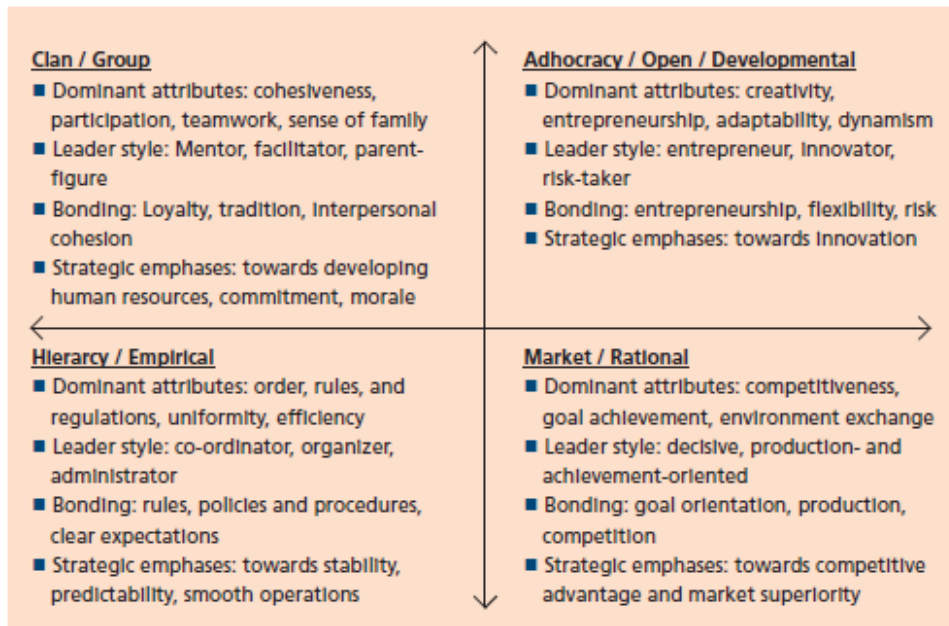
Several points can be drawn. Firstly, culture exists in organisations as it is 'shared' by most members of organisations. Secondly, it shapes the way members of organisations think and behave in organisational settings. Thirdly, apart from governing behaviour function, culture itself is 'an abstract entity' whose presence can be manifested through the use of symbolic aspects, such as language, symbols, or myths.

Given that it is a very complex concept, scholars try to scrutinise different aspects of organisational culture such as levels, degree of agreements, and also types of culture. Regarding the link between culture and performance, the literature includes seminal works on competing value framework depicting how different types of culture can exist in organisations (Denison and Spreitzer, 1991). This framework was initially developed to analyse organisational effectiveness; and later on was extended to depicture organisational culture (Quinn and Rohrbaugh, 1981; Quinn and Kimberly, 1984; Denison and Spreitzer, 1991).

This framework is based on two different axes, whereby its vertical axis represents the conflicting dynamics of change and stability. The focus on change concerns issues of flexibility, decentralisation, and also differentiation; the focus of stability represents issues such as centralisation and integration. As for the horizontal axis, it depicts the conflicting focus on internal environment, which focuses on integration, and for external environment represents interaction with environment as well as competition (Denison and Spreitzer, 1991). A combination of these two axes results in four types of culture, whereby each type has its opposite or competing values (Cameron and Quinn, 2005).

Besides showing ideal types of culture, this framework also suggests that organisations, such as healthcare providers, may embody a combination of paradoxical values or cultural types where one type potentially prevails over the other (Denison and Spreitzer, 1991; Evans, 2009). This also implies that concentrating on one single cultural orientation may lead to unintended dysfunctional consequences, especially when it is related to performance. For example, an over emphasis on flexibility may lead to chaotic condition creating an

27

Clan / Group
- Dominant attributes: cohesiveness, participation, teamwork, sense of family
- Leader style: Mentor, facilitator, parent-figure
- Bonding: Loyalty, tradition, interpersonal cohesion
- Strategic emphases: towards developing human resources, commitment, morale

Adhocracy / Open / Developmental
- Dominant attributes: creativity, entrepreneurship, adaptability, dynamism
- Leader style: entrepreneur, innovator, risk-taker
- Bonding: entrepreneurship, flexibility, risk
- Strategic emphases: towards innovation

Hierarcy / Empirical
- Dominant attributes: order, rules, and regulations, uniformity, efficiency
- Leader style: co-ordinator, organizer, administrator
- Bonding: rules, policies and procedures, clear expectations
- Strategic emphases: towards stability, predictability, smooth operations

Market / Rational
- Dominant attributes: competitiveness, goal achievement, environment exchange
- Leader style: decisive, production- and achievement-oriented
- Bonding: goal orientation, production, competition
- Strategic emphases: towards competitive advantage and market superiority

inability to control, yet, excessive control may also impact negatively on the organisations creating rigidity and lack of responsiveness to change (Denison and Spreitzer, 1991; Scott et al, 2003).

Scholars also assert that culture may be associated with high performance if it can flexibly adjust to changes, but such a culture may be difficult to replicate because it is unique to a specific organisation (Gordon and DiTomaso, 1992; Lewis, 1994; Ogbonna and Harris, 2000). Other authors, such as Kerr and Slocum (1987) allege that change process will not survive if it is not supported by organisational values and norms. Hence, it can be inferred that in order to cope with change and maintain good performance, organisations must carefully utilise their culture.

In the UK healthcare sector, many policies imposed on organisations force them to 'change' themselves accordingly. Imposing policies to improve performance of healthcare organisations by setting up performance targets through QOF has been noted to have a potential impact on organisational culture in a sense that it may affect the way practices conduct their services (McLean and Taylor, 2007; Grant et al, 2009).

Methods

This study employed purposive sampling methods, which enable researcher to engage deeply in context-fit and information-rich cases (Patton, 2002; Denzin and Lincoln, 2005; Stake, 2005). For multiple case studies, there are no exact rules for determining sample size or cases (Patton, 2002); yet, most researchers assume that a minimum of two cases can be used (Checkland et al, 2007; Grant et al, 2009; McDonald et al, 2009). On this base, two GP practices in England were selected based on the criteria of being large-size organisations and having consistently high QOF score. While a consistently high score reflects good-performance organisations; large-size practice may reflect better technical facilities and more substitution of clinical tasks by non-physician health professionals (Wensing et al, 2009). Previous studies advocated the use of practice size as defined by the annual numbers of patients (Bower et al, 2003; Wang et al, 2006; The NHS Information Centre, 2007). Accordingly, large-size practices are those serving more than 8000 patients per year (The NHS Information Centre, 2007).

Prior to data collection, this study obtained Ethics and Research Governance Approval from

28

the NHS ethics committee, NHS Research and Development department, and also from the University of York Ethics Committee. There was no conflict of interest involving funding bodies, research issues, and the researcher.

Interviews were taped with each participant's consent. They were then transcribed, read and re-read by the researcher. These processes helped constructed the major themes of the analysis. This paper represents parts of these key themes.

Data analysis involves processes of examination, categorisation, tabulation, test, and combination of evidence to produce empirical conclusions (Yin, 2009). Pattern matching techniques alongside cross-case(s) analysis were used to identify themes and issues that are of relevance to the case study data.

Finding and analysis

This study collected data from two large GP practices in the north of England. Practice A serves more than 13 000 patients, while Practice B provides healthcare services for more than 20 000 patients. Both practices had obtained high QOF points since 2004 . The study interviewed seven GPs, two salaried GPs, three practice nurses, one healthcare assistants, two practice managers, and four admin staff. The working experience range of the respondents varied from a minimum of 2 years up to 20 years. Semi-structured interviews were conducted averaging 40–60 minutes per respondent.

Changes in percieved core values

Regarding the understanding of organisational culture, the responses varied significantly from Practice A to Practice B. While in Practice A, some respondents admitted confusion about its definition and mistakenly associated culture with different background of people or variety of ethnicities of healthcare staff or patients, those working in Practice B were more outspoken on stressing their shared value.

Practice B has their values stated in three words, which were 'professionalism, unity, and balance'. According to the two most senior partner GPs, those values were held strongly and represented the anchors for practices that were always brought up in meetings.

While holding these as core values, staff members differed in how they saw these values reflected in their works. Nurses translated and reflected these values in their job as 'treat everybody as you would yourself', 'high standard and high expectation'; most clinicians asserted that this was reflected in policies and practices, such as their commitment to invest in people, openness and sharing, listening to others, and respect. Interestingly, when asked the same question, admin staff responded differently by stating that the culture was supportive to their jobs and what they were doing in terms of providing a 'no-blame' culture.

It can be said that respondents were aware that they had a certain culture; yet, the way they interpreted this culture varied. Additionally, it is worth noting that Practice B provided uniforms for staff. Besides representing an 'artefact' to support the image of professionalism, this may reflect change initiated by top management.

Despite differences, with regard to core organisational values on dealing with patients, both practices recognised that the priority is patient care. This view was widely shared by healthcare professionals working in both practices. The quality of care was the priority; hence putting patients first was a must. A senior nurse in the practice expressed that 'we have one goal that everything's for patients or in tight with patient values'. Furthermore, making patients a priority did not only involve clinicians or nurses, but also involved everyone in the practice.

At this point, caring for patients was considered a core value in terms of providing high quality service in both practices. Interestingly, some respondents were not sure that basic value was written in formal documents. Therefore, it can be inferred that most staff took this as part of their personal values, which was reflected back as the value held collectively at the organisational level. This was strengthened by the nature of their jobs, requiring them to deal with people and putting people's life as their priority.

Regarding changes after 2004, both practices alleged that this did not involve significant change in their values as these were still about caring patients. Yet, QOF was considered to have influenced the way practices delivered healthcare services. For example, in the way in which they were required to have support system, such as a recall system, in place to ensure that they can follow up patients in managing their health. This would help practices to contribute to the improvement of national health by monitoring the quality of individual patients' health in the long term.

Although, the QOF scheme did not appear to alter the practices core values, it is interesting to explore how people perceive changes in the characteristics of culture when it is linked to performance and how this has been affected by the implementation of the new GMS contract with QOF.

Changes in the characteristics of culture

With regard to characteristics of culture and its links to organisational performance, this research employed a Competing Value Framework (CVF) to approach changes in practices' culture and its related features. This study did not intend to identify discrepancies or shift of performance before and after QOF.

On this issue, it is interesting to note that the perceptions are varied . Most respondents perceived that there had been shifts of culture after 2004, yet, there were some sensed that there had been no significant changes. Furthermore, although most respondents perceived that their organisations reflected clan/group culture either as dominant or secondary characteristics, both practices appears to have moved in different directions after 2004.

In practice A, most respondents suggested that a Clan Culture was dominant. In addition to clan/group culture, it is worth noting that they had some characteristics of hierarchical culture. Regarding perceived changes due to the QOF, most of them agreed that their culture had moved toward a more market/rational culture.

Apart from changes perceived in the characteristics of culture, people also suggested that the implementation of QOF required them to be more creative in improving the process of delivering healthcare services. However, although in general changes in culture had taken place; some people thought that these were not necessarily caused by QOF. Rather, dynamics in the external environment of organisation were perceived to have contributed to these changes.

Most of those working in Practice B asserted that their organisation had a strong clan culture. Yet, they also admitted that it was not a pure clan culture but more of a mixture of attribute from different types of culture.

For the purpose of highlighting differences in views, it is worth noting that all types of culture were mentioned during interviews with Practice B. This meant that the way people perceived changes in culture varied depending on how they looked at certain aspects.

Interestingly, this diversity of perceptions was notable when respondents in Practice B were asked about changes after 2004. Some said that there had not been any significant change or

that changes were not necessarily associated with QOF. In terms of the characteristics of culture, a general pattern can be drawn to show that the practice moved from what was primarily a mixture of clan and hierarchical culture to a mixture of clan and open/adhocracy/developmental culture.

Hence, it can be seen that each practice moved in different directions although both are still embracing clan culture. While practice A moved from a combination of clan/hierarchy toward clan/market culture, practice B moved from clan/hierarchy to a clan/open culture, which was attributed to QOF as one of causal aspects.

In Practice A, QOF was deemed to contribute to change in a way that its targets needed to be fulfilled. In that sense, it has required the practice to think about goal achievement, which was not only about organisation's strategic goals but also about the way they delivered healthcare. A shift toward market culture brings along dominant attributes such as competitiveness, goal achievement, and environmental concerns (Scott et al, 2003; Cameron and Quinn, 2005). In this context, these emphases are translated by the practice through installing support system and ensuring that goal achievement was possible and manageable.

As for practice B, most people suggested that before 2004, their culture had been a combination between clan and market culture, and then moved toward a mixture of clan and open/adhocracy/developmental culture. Having an open or adhocracy culture, dominant attributes within the practice include creativity, entrepreneurships, adaptability, and dynamism (Scott et al, 2003; Cameron and Quinn, 2005). With regard to these attributes, most respondents were keen to think that after the implementation of QOF, there was more of an entrepreneurial spirit in the practice. Indeed, based on interviews, this culture seems to have

translated into the way the organisation is managed. This practice is actually now part of corporate-like business, which has spread its wings to other healthcare-related services. The partnership has also expanded its geographic coverage by opening a branch in a neighbouring city. Referring back to how this practice put more emphasis on professionalism, it can be argued that the practice's core values go in-line with an open/adhocracy culture in the competing value framework. Most people took the fact that along with other dynamics in external environment, QOF has pushed the practice to think beyond their available income possibilities. Even though 'patients coming first' is still a priority, the partners have looked further to ensure the sustainability of their practice income. This was based on the idea that there would be less money available and that the practice would 'have to go away and look at other areas of deriving income'.

Discussion

Although the ways practices establish and embed their unique organisational values and norms to their people are different; their orientations toward providing high quality healthcare service for patients are similar. Their natures as healthcare providers and people working in such organisations are drawn together and strongly reflected in their efforts to provide patients services.

While the basic value of prioritising on patients was not changed, QOF was perceived to have impacted on the process of how healthcare service was delivered to patients. This paralleled the results of the author's systematic review, which said that 70% reviewed studies suggested that QOF emphasised more on process measures than outcome ones . Moreover, after the introduction of QOF, GPs have become more concerned about the financial matters in the practice.

The findings of this study strength that

31

KEY POINTS

- The Quality and Outcomes Framework did not appear to alter the GP practices' core values
- GP practices had a strong clan/ group organisational culture with different attributes from other types of culture
- Organisational culture of the GP practices had moved toward a more market/rational culture after the Quality and Outcomes Framework scheme

it is critical to look at significant people in organisations, such as manager or founder, who potentially colour organisational characters. The practice manager was said to have brought a specific 'character' to the practice. In capturing this aspect, scholars asserts that leaders of organisations can contribute to changes of culture (Gagliardi, 1986; Schein, 2010). Gagliardi suggests that leaders have the power to create culture as they want it to be, which is then followed by members of the organisation as a dogma. At the end, it becomes unconsciously embedded, 'emotionally transfigured', and provides a background for potential cultural change (Gagliardi, 1986).

Conclusion

The Quality and Outcome Framework was established by the UK Government through the new General Medical Service Contract with primary care organisation. This contract was intended to improve the performance of healthcare organisations in providing their services to patients through pay-for-performance incentive schemes. Interestingly, this study confirms that at the organisational level, the scheme does not only change the way organisations are incentivised and get income, but also affects cultural and characteristics of organisations. Although the existence of external environmental dynamics cannot be neglected from the context of this analysis, this study has been able to underline the contribution of QOF to the alteration of the characteristics of culture in primary care organisations. This result provides a preliminary foundation for a broader exploration of organisational aspects which are affected by QOF. Indeed, changes in cultural characteristics are linked to different attributes which closely relate to issues such as leaderships, strategy, structure, power, and also identity at an organisational level.

While this study had been able to successfully interview healthcare professionals and people working in different practices, it is possible that some essential information has been missed which would have been obtainable only from those who did not participate. The study has tried to lessen this limitation by ensuring that those selected by practice managers for interviewed were those most aware of QOF. Additionally, the study also tried to lessen possible biases by covering various professions in practices. Yet, the number of participants was limited and the two involved practices were located in the same geographical area, which was categorised as a non-deprived area. Hence, the generalisability of the findings to other settings in other geographical areas, especially those who have different culture is questionable. **BJHCM**

Alvesson M (2002) *Understanding Organizational Culture*. Sage, London

Ashworth M, Seed P, Armstrong D, Durbaba S, Jones R (2007) The relationship between social deprivation and the quality of primary care: a national survey using indicators from the UK Quality and Outcomes Framework. *Br J Gen Pract* 57(539): 441–8

Bower P, Campbell S, Bojke C, Sibbald B (2003) Team structure, team climate and the quality of care in primary care: an observational study. *Qual Saf Health Care* 12(4): 273–9

Burke WW, Litwin GH (2008) A causal model of organizational performance and change. In: Burke WW, Lake DG, Paine JW, eds. *Organization Change: A Comprehensive Reader*: 273–99

Cameron KS, Quinn RE (2005) *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. Jossey-Bass, San Francisco, CA

Campbell SM, McDonald R, Lester H (2008) The experience of pay for performance in English family practice: a qualitative study. *Ann Fam Med* 6(3): 228

Checkland KH, McDonald ER, Harrison SR (2007) Ticking boxes and changing the social world: data collection and the new UK general practice contract. *Social Policy and Administration* 41(7): 693–710

Cupples ME, Byrne MC, Smith SM, Leathem CS, Murphy AW (2008) Secondary prevention of cardiovascular disease in different primary healthcare systems with and without pay-for-performance. *Heart* 94(12): 1594

Cutler TW, Palmieri J, Khalsa M, Stebbins M (2007) Evaluation of the relationship between a chronic disease

care management program and california pay-for-performance diabetes care cholesterol measures in one medical group. *J Manag Care Pharm* 13(7): 578–88

Denison DR, GM Spreitzer (1991) Organizational Culture and Organizational Development: A Competing Values Approach. *Research in Organizational Change and Development* 5(1): 1–21

Denzin NK, Lincoln YS (2005) Introduction: the discipline and practice of qualitative research. In Denzin NK, Lincoln YS, eds. *The SAGE Handbook of Qualitative Research*. 3rd edn. Sage, Thousand Oaks

Doran T, Fullwood C, Gravelle H et al (2006) Pay-for-performance programs in family practices in the United Kingdom. *N Engl J Med* 355(4): 375

Evans RM (2009) Culture values and ethics. In: Johnson JA, ed. *Health Organizations: Theory, Behavior, and Development*. Jones and Bartlett Publishers, Sudbury, MA

Falaschetti E, Campbell NR, Mohan S, Poulter N (2009) Implementation of Pay for Performance Policy in England. *Hypertension* 54(1): e5

Gagliardi P (1986) The creation and change of organizational cultures: a conceptual framework. *Organization Studies* 7(2): 117–34

Gordon GG, DiTomaso N (1992) Predicting corporate performance from organizational culture. *Journal of Management Studies* 29(6): 783–98

Grant S, Huby G, Watkins F (2009) The impact of pay-for-performance on professional boundaries in UK general practice: an ethnographic study. *Sociol Health Illn* 31(2): 229–45

Guthrie B, McLean G, Sutton M (2006) Workload and reward in the Quality and Outcomes Framework of the 2004 general practice contract. *Br J Gen Pract* 56(532): 836

Kerr J, Slocum JW (1987) Managing corporate culture through reward systems. *The Academy of Management Executive* 1(2): 99–107

Kunda G (1992) *Engineering Culture: Control and Commitment in a High-Tech Corporation*. Temple University Press, Philadelphia, PA

Lewis DS (1994) Organizational change: relationship between reactions, behaviour and organizational performance. *Journal of Organizational Change Management* 7: 41

Mannion R, Davies HTO (2008) Payment for performance in health care. *BMJ* 336(7639): 306

McDonald R, Checkland K, Harrison S, Coleman A (2009) Rethinking collegiality: restratification in English general medical practice 2004–2008. *Soc Sci Med* 68(7): 1199–205

McDonald R, Roland M McDonald R, Roland M (2009) Pay for performance in primary care in England and California: comparison of unintended consequences. *Ann Fam Med* 7(2): 121

McLean K, Taylor W (2007) Identifying the barriers to implementing a quality initiative in primary care: the views of practices in Scotland on the Quality Practice Award. *Qual Prim Care* 15(6): 353–9

Miles MB, Huberman M (1994) *Qualitative Data Analysis: An Expanded Sourcebook*. Sage, London

The NHS Information Centre (2006) *The Quality and Outcomes Framework 2006/07*. http://tinyurl.com/oybhut (accessed 1 July 2011)

The NHS Information Centre (2007) *2006/2007 UK General Practice Workload Survey*. http://tinyurl.com/6z5efk3 (accessed 1 July 2011)

O'Reilly CA, Chatman JA (1996) Culture as social control: corporations, cults, and commitment. In: Staw BM, Cummings LL, eds. *Research in Organizational Behavior*. Connecticut JAI Press, Greenwich

Ogbonna E, Harris LC (2000) Leadership style, organizational culture and performance: empirical evidence from UK companies. *The International Journal of Human Resource Management* 11(4): 766–88

Patton MQ (2002) *Qualitative Evaluation and Research Methods*. 3rd edn. Sage, London

Pfeffer J (1997) *New Directions for Organization Theory: Problems and Prospects*. Oxford University Press, New York

Quinn RE, Kimberly JR (1984) Paradox, planning, and preseverance: guidelines for managerial practice. In: Kimberly JR, Quinn RE, eds. *Managing Organizational Transitions*. : Richard D. Irwin, Homewood, IL

Quinn RE, Rohrbaugh J (1981) A competing values approach to organizational effectiveness. *Public Productivity Review* 5(2): 122–40

Roland M (2004) Linking physicians' pay to the quality of care—a major experiment in the United Kingdom. *N Engl J Med* 351(14): 1448–54

Schein EH (1990) Organizational culture. *Am Psychol* 45(2): 109–19

Schein EH (2010) *Organizational Culture and Leadership*. 4th edn. Jossey-Bass, San Francisco, CA

Schwandt TA (2007) *The Sage Dictionary of Qualitative Inquiry*. 3rd end. Sage, London

Scott T, Mannion R, Marshall M, Davies H (2003) Does organisational culture influence health care performance? A review of the evidence. *J Health Serv Res Policy* 8(2): 105–17

Stake RE (2005) Qualitative case study. In: Denzin NK, Lincoln YS, eds. *The SAGE Handbook of Qualitative Research*. 3rd edn. Sage, Thousand Oaks, CA

Tahrani AA, McCarthy M, Godson J et al (2007) Diabetes care and the new GMS contract: the evidence for a whole county. *Br J Gen Pract* 57(539): 483

Wang Y, O'Donnell CA, Mackay DF, Watt GC (2006) Practice size and quality attainment under the new GMS contract: a cross-sectional analysis. *Br J Gen Pract* 56(532): 830

Watson TJ (2002) *Organising and Managing Work: Organisational, Managerial, and Strategic Behaviour in Theory and Practice*. Pearson Education Limited, Harlow

Wensing M, Van den Hombergh P, Van Doremalen J, Grol R, Szecsenyi J (2009) General practitioners' workload associated to practice size rather than chronic care organisation. *Health Policy* 89(1): 124–9

Wright J, Martin D, Cockings S, Polack C (2006) Overall quality of outcomes framework scores lower in practices in deprived areas. *Br J Gen Pract* 56(525): 277

Yin RK (2009) *Case Study Research: Design and Methods*. 4th ed. Sage, London

33

LIST OF ABREVIATIONS

QOF	:	Quality and Outcomes Framework
P4P	:	Payment for Performance
GP	:	General Practice
NAO	:	National Audit Office
*n*GMS	:	New General Medical Service contract
IT	:	Information Technology
GPs	:	General Practitioners
NHS	:	National Health Service
NPM	:	New Public Management
EMR	:	Electronic Medical Record
BMA	:	British Medical Association
DHSS	:	Department of Health and Social Security
DoH	:	Department of Health
HMSO	:	Her Majesty Stationary Office
HMOs	:	Health Maintenance Organisation(s)
LIFT	:	Local Improvement Finance Trust
PFI	:	Private Finance Initiative
Old GMS	:	Old General Medical Service contract
PMS	:	Personal Medical Service contract
PCT	:	Primary Care Trust
GPC	:	General Practitioner Committee
NHS – PCC	:	National Health Service – Primary Care Commissioning
NICE	:	National Institute for Health and Clinical Excellence
OM	:	Organisational Memory
HCAs	:	Health Care Assistant(s)

REFERENCES

Abel, M. H. (2008). Competencies management and learning organizational memory. *Journal of Knowledge Management,* 12 (6)**,** 15-30.

Accenture (2005). Achieving high performance in health care: Pay for performance - moving the bar on quality reporting and accountability. Accenture - Health & Sciences Division, North American Providers.

Achat, H., Mcintyre, P. and Burgess, M. (1999). Health care incentives in immunisation. *Australian and New Zealand journal of public health,* 23 (3)**,** 285-288.

Ackerman, L. (1997). Development, transition, or transformation: The question of change in organisations. *In:* Van Eynde, D. F., Hoy, J. C. and Van Eynde, D. C. (eds.) *Organization development classics: The practice and theory of change - the best of the OD practitioner.* San Francisco: Jossey-Bass Publishers,

Adler, P. S., Goldoftas, B. and Levine, D. I. (1999). Flexibility versus efficiency? A case study of model changeovers in the Toyota production system. *Organization Science,* 10 (1)**,** 43-68.

Aguilar, F. (1967). *Scanning the business environment,* New York, Macmillan.

Aimé, S. (1997). Reinventing strategic management: New theory and practice for competence-based competition. *European Management Journal,* 15 (3)**,** 303-317.

Alabbadi, I., Crealey, G., Turner, K., Rafferty, T., Keenan, L., Murray, P. and Mcelnay, J. C. (2010). Statin prescribing in northern Ireland and England pre and post introduction of the Quality and Outcomes Framework. *Pharmacy world & science,* 32 (1)**,** 43-51.

Albert, S. & Whetten, D. A. (2004). Organizational identity. *In:* Hatch, M. J. & Schultz, M. (eds.) *Organizational identity: A reader.* Oxford, UK: Oxford University Press,

Alcock, P. (2002). Welfare policy. *In:* Dunleavy, P., Gamble, A., Heffernan, R., Holliday, I. and Peele, G. (eds.) *Developments in British politics 6.* Basingstoke, UK: Palgrave,

Aldrich, H. (2007). *Organizations and environments*, Stanford Business Books.

Alexander, J. A., Rundall, T. G., Hoff, T. J. and Morlock, L. L. (2006). Power and politics. *In:* Shortell, S. M. and Kaluzny, A. D. (eds.) *Health care management: Organization design and behaviour.* 5th Edition. New York: Thomson Delmar Learning, 276-310.

Alford, R. R. (1975). *Health care politics: Ideological and interest group barriers to reform,* Chicago, University of Chicago Press.

Alshamsan, R., Majeed, A., Ashworth, M., Car, J. and Millett, C. (2010). Impact of pay for performance on inequalities in health care: Systematic review. *Journal of Health Services Research & Policy,* 15 (3)**,** 178.

Alvesson, M. (2002). *Understanding organizational culture,* London, Sage.

Anand, V., Manz, C. C. and Glick, W. H. (1998). An organizational memory approach to information management. *Academy of Management Review,* 23 (4)**,** 796-809.

Anderson, J. R. (1996). *The architecture of cognition*, Lawrence Erlbaum.

APHO & DoH (2010). Health profile 2009 - Yorkshire and the Humber. *In:* Health, D. O. (ed.). London: The Stationary Office.

Appelbaum, S. H. and Goransson, L. (1997). Transformational and adaptive learning within the learning organization: A framework for research and application. *Learning Organization, The,* 4 (3)**,** 115-128.

Applebaum, S. H. and Wohl, L. (2000). Transformation or change: Some prescriptions for health care organizations. *Managing Service Quality,* 10 (5)**,** 279-298.

Argote, L. (1999). *Organizational learning: Creating, retaining, and transferring knowledge*, Springer Netherlands.

Argote, L. & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms* 1. *Organizational behaviour and human decision processes,* 82 (1)**,** 150-169.

Argote, L., Mcevily, B. and Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management Science,* 49 (4)**,** 571-582.

Armour, B. S., Pitts, M. M., Maclean, R., Cangialose, C., Kishel, M., Imai, H. and Etchason, J. (2001). The effect of explicit financial incentives on physician behaviour. *Archives of Internal Medicine,* 161 (10)**,** 1261.

Ashworth, M. and Armstrong, D. (2006). The relationship between general practice characteristics and quality of care: A national survey of quality indicators used

in the UK Quality and Outcomes Framework, 2004-5. *BMC family practice,* 7**,** 68.

Ashworth, M., Medina, J. & Morgan, M. (2008). Effect of social deprivation on blood pressure monitoring and control in England: A survey of data from the Quality and Outcomes Framework. *British Medical Journal,* 337 (oct28 2)**,** a2030.

Ashworth, M., Seed, P., Armstrong, D., Durbaba, S. and Jones, R. (2007). The relationship between social deprivation and the quality of primary care: A national survey using indicators from the UK Quality and Outcomes Framework. *The British Journal of General Practice,* 57 (539)**,** 441.

Baker, D. and Middleton, E. (2003). Cervical screening and health inequality in England in the 1990s. *Journal of Epidemiology and Community Health,* 57 (6)**,** 417.

Baker, G. & Carter, B. (2005). Provider pay-for-performance incentive programs: 2004 national study results. Med-Vantage, Inc.

Bankauskaite, V. & Saltman, R. B. (2007). Central issues in the decentralization debate. *In:* Saltman, R. B., Bankauskaite, V. and Vrangbæk, K. (eds.) *Decentralization in health care: Strategies and outcomes.* Maidenhead, Berkshire: Open University Press - McGraw Hill Education, 9-21.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management,* 17 (1)**,** 99.

Barney, J. B. (1996). The resource-based theory of the firm. *Organization Science,* 7 (5)**,** 469.

Barney, J. B. (2001). Is the resource-based "View" A useful perspective for strategic management research? Yes. *The Academy of Management Review,* 26 (1)**,** 41-56.

Baumann, M. H. and Dellert, E. (2006). Performance measures and pay for performance. *American College of Chest Physicians,* 129 (1)**,** 188-191.

Baumgart, A. and Neuhauser, D. (2009). Frank and Lillian Gilbreth: Scientific management in the operating room. *Quality and Safety in Health Care,* 18 (5)**,** 413-415.

Bazzoli, G. J., Dynan, L., Burns, L. R. and Yap, C. (2004). Two decades of organizational change in health care: What have we learned? *Medical Care Research and Review,* 61 (3)**,** 247.

Bazzoli, G. J., Shortell, S. M., Dubbs, N., Chan, C. and Kralovec, P. (1999). A taxonomy of health networks and systems: Bringing order out of chaos. *Health Services Research,* 33 (6)**,** 1683.

Beaulieu, N. D. and Horrigan, D. R. (2005). Organisational processes and quality: Putting smart money to work for quality improvement. *Health Services Research,* 40**,** 1318 - 1334.

Becker, M. C. (2004). Organizational routines: A review of the literature. *Industrial and Corporate Change,* 13 (4)**,** 643.

Becker, M. C., Lazaric, N., Nelson, R. R. and Winter, S. G. (2005). Applying organizational routines in understanding organizational change. *Industrial and Corporate Change*.

Bedeian, A. G. & Zammuto, R. F. (1991). *Organizations: Theory and design*, Dryden Press.

Begun, J. W., Zimmerman, B. and Dooley, K. (2003). Health care organizations as complex adaptive systems. *In:* Mick, S. M. and Wyttenbach, M. (eds.) *Advances in health care organisation theory.* San Francisco: Jossey-Bass, 253-288.

Bensabat, I., Goldstein, D. K. and Mead, M. (1987). The case research strategy in studies of information systems. *Mis Quarterly,* 11 (3)**,** 369-386.

BMA (2009). Quality and Outcomes Frameworks for GMS contract 2009/10: Delivering investment in general practice. London: British Medical Association.

Bokhour, B. G., Burgess Jr, J. F., Hook, J. M., White, B., Berlowitz, D., Guldin, M. R., Meterko, M. and Young, G. J. (2006). Incentive implementation in physician practices: A qualitative study of practice executive perspectives on P4P. *Medical Care Research and Review,* 63**,** 73S-95S.

Bottle, A., Shamini, G., Saxena, S., Aylin, P., Mainous Iii, A. G. and Majeed, A. (2007). Association between quality of primary care and hospitalization for coronary heart disease in England: National cross-sectional study. *Journal of General Internal Medicine,* 23 (2)**,** 135-141.

Bower, P., Campbell, S., Bojke, C. and Sibbald, B. (2003). Team structure, team climate and the quality of care in primary care: An observational study. *Quality and Safety in Health Care,* 12 (4)**,** 273.

Bowey, A. M. (1982). *Handbook of salary and wage systems (a Gower Handbook),* England, Gower.

Bozic, K. J., Smith, A. R. and Mauerhan, D. R. (2007). Pay-for-performance in orthopaedics: Implications for clinical practice. *The Journal of arthroplasty,* 22 (6)**,** Supplement 2: 8-12.

Briggs, A. (1969). *How they lived (Vol. 3),* Oxford, England, Blackwell.

Brown, J. S. and Duguid, P. (1991). Organizational learning and communities-of-practice: Toward a unified view of working, learning, and innovation. *Organization Science* 2(1)**,** 40-57.

Brown, S. W., Gummesson, E., Edvarsson, B. and Gustavsson, B. (1991). *Service quality: Multidisciplinary and multinational perspectives,* New York, Lexington Books.

Brunetto, Y. and Farr-Wharton, R. (2005). The impact of npm on the job satisfaction of a range of australian public sector employees. *Asia Pacific Journal of Human Resources,* 43 (2)**,** 289.

Bruni, M. L., Nobilio, L. and Ugolini, C. (2009). Economic incentives in general practice: The impact of pay for participation programs on diabetes care. *Health Policy,* 90 (2), 140-148, Published online 07 November 2008.

Buchanan, D. & Huczynski, A. (2004). *Organizational behaviour an introductory text*, 5th edition Financial Times\Prentice Hall.

Burgelman, R. A. (1983). A model of the interaction of strategic behaviour, corporate context, and the concept of strategy. *The Academy of Management Review,* 8 (1)**,** 61-70.

Burke, W. W. & Litwin, G. H. (2008). A causal model of organizational performance and change. *In:* Burke, W. W., Lake, D. G. and Paine, J. W. (eds.) *Organization change: A comprehensive reader.* 273-299.

Burns, T. & Stalker, G. M. (1994). *The management of innovation*, Oxford University Press, USA.

Calvert, M., Shankar, A., Mcmanus, R. J., Lester, H. and Freemantle, N. (2009). Effect of the Quality and Outcomes Framework on diabetes care in the United Kingdom: Retrospective cohort study. *British Medical Journal,* 338 (May2009)**,** b1870.

Campbell, S. (2009). The impact of the UK Quality and Outcomes Framework (QOF) on general practice quality of care. *Deutsch Med Wochenschr,* 134**,** s323.

Campbell, S. & Lester, H. (2011). Developing indicators and the concept of Qofability. *In:* Gillam, S. & Siriwardena, A. N. (eds.) *The quality and outcomes framework:*

QOF transforming general practice. Oxon, UK: Radcliffe Publishing Ltd., 16-30.

Campbell, S., Reeves, D., Kontopantelis, E., Middleton, E., Sibbald, B. and Roland, M. (2007). Quality of primary care in England with the introduction of P4P. *The New England journal of medicine,* 357**,** 181-190.

Campbell, S., Steiner, A., Robison, J., Webb, D., Raven, A., Richards, S. and Roland, M. (2005). Do Personal Medical Services contracts improve quality of care? A multi-method evaluation. *Journal of Health Services Research & Policy,* 10 (1)**,** 31.

Campbell, S. M., Mcdonald, R. and Lester, H. (2008). The experience of pay for performance in English family practice: A qualitative study. *The Annals of Family Medicine,* 6 (3)**,** 228.

Campbell, S. M., Reeves, D., Kontopantelis, E., Sibbald, B. and Roland, M. (2009). Effects of pay for performance on the quality of primary care in England. *New England Journal of Medicine,* 361 (4)**,** 368.

Carlile, P. R. and Rebentisch, E. S. (2003). Into the black box: The knowledge transformation cycle. *Management Science,* 49 (9)**,** 1180-1195.

Carter, W. (2004). Evidence-based medicine in the law beyond clinical practice guidelines: What effect will EMB have on the standards of care. *Washington and Lee Law Review,* 61 (479).

Casalino, L., Alexander, G., Jin AND Konetzka, T. (2007). General internists' view on pay for performance and public reporting of quality scores: A national survey. *Health Affairs,* 26 (2)**,** 492-499.

Chandler, A. D. (1962). *Strategy and structure,* Cambridge, Massachussets, MIT Press.

Checkland, K. (2004a). Management in general practice: The challenge of the new General Medical Services contract. *The British Journal of General Practice,* 54 (507)**,** 734.

Checkland, K. (2004b). National service frameworks and UK general practitioners: Street level bureaucrats at work? *Sociology of health & illness,* 26 (7)**,** 951-975.

Checkland, K. (2007). Understanding general practice: A conceptual framework developed from case studies in the UK NHS. *The British Journal of General Practice,* 57 (534)**,** 56.

Checkland, K. and Harrison, S. (2010). The impact of the Quality and Outcomes Framework on practice organisation and service delivery: Summary of evidence from two qualitative studies. *Quality in Primary Care,* 18**,** 139-146.

Checkland, K., Harrison, S., Mcdonald, R., Grant, S., Campbell, S. and Guthrie, B. (2008). Biomedicine, holism and general medical practice: Responses to the 2004 general practitioner contract. *Sociology of Health and Illness,* 30 (5)**,** 788-803.

Checkland, K., Mcdonald, R. and Harrison, S. (2007). Ticking boxes and changing the social world: Data collection and the new UK general practice contract. *Social Policy & Administration,* 41 (7)**,** 693-710.

Chen, J. Y., Kang, N., Juarez, D. T., Hodges, K. A. and Chung, R. S. (2010a). Impact of a pay for performance program on low performing physicians. *Journal for Healthcare Quality,* 32 (1)**,** 13-22.

Chen, J. Y., Tian, H., Juarez, D. T., Hodges, K. A., Brand, J. C., Chung, R. S. and Legoretta, A. P. (2010b). The effect of a PPO pay for performance program on patients with diabetes. *The American Journal of Managed Care,* 16 (1)**,** e11-e19.

Chi, M. T. H. (2008). Three types of conceptual change: Belief revision, mental model transformation, and categorical shift. *International handbook of research on conceptual change***,** 61–82.

Chien, A., Chin, M., Davis, A. and Casalino, L. (2007). P4P, public reporting, and racial disparities in health care: How are programs being designed? *Medical Care Research and Review,* 64**,** 283S - 304S.

Chien, A. T., Li, Z. and Rosenthal, M. B. (2010). Improving timely childhood immunizations through pay for performance in Medicaid-managed care. *Health Services Research,* 45 (6), 1934-1947.

Chou, S. W. (2005). Knowledge creation: Absorptive capacity, organizational mechanisms, and knowledge storage/retrieval capabilities. *Journal of Information Science,* 31 (6)**,** 453.

Christianson, J. B., Leatherman, S. & Sutherland, K. (2007). Financial incentives, healthcare providers, and quality improvements. The Health Foundation.

Chung, S., Palaniappan, L., Wong, E., Rubin, H. and Luft, H. (2010a). Does the frequency of pay-for-performance payment matter?—experience from a randomized trial. *Health Services Research,* 45 (2)**,** 553-564.

Chung, S., Palaniappan, L. P., Trujillo, L. M., Rubin, H. R. and Luft, H. S. (2010b). Effect of physician-specific pay-for-performance incentives in a large group practice. *The American Journal of Managed Care,* 16 (2)**,** e35.

Cohen, M. D. (1991). Individual learning and organizational routine: Emerging connections. *Organization Science,* 2 (1)**,** 135-139.

Cohen, M. D. and Bacdayan, P. (1994). Organizational routines are stored as procedural memory: Evidence from a laboratory study. *Organization Science,* 5 (4)**,** 554-568.

Cohen, M. D., Burkhart, R., Dosi, G., Egidi, M., Marengo, L., Warglien, M. and Winter, S. (1996). Routines and other recurring action patterns of organizations: Contemporary research issues. *Industrial and Corporate Change,* 5 (3)**,** 653.

Coleman, K., Reiter, K. and Fulwiler, D. (2007). The impact of pay for performance on diabetes care in a large network of community health centres. *Journal of Health Care for the Poor and Underserved,* 18**,** 966-983.

Coleman, T. (2010). Do financial incentives for delivering health promotion counselling work? Analysis of smoking cessation activities stimulated by the Quality and Outcomes Framework. *BMC Public Health,* 10**,** 167-172.

Cong, X. and Pandya, K. V. (2003). Issues of knowledge management in the public sector. *Electronic Journal of Knowledge Management,* 1 (2)**,** 25-33.

Conklin, J. (1996). Designing organizational memory: Preserving intellectual assets in a knowledge economy. *Group Decision Support Systems,* 1**,** 362.

Conrad, D. A., Mick, S. S., Watts Madden, C. and Hoare, G. (1988). Vertical structures and control in health care markets: A conceptual framework and empirical review. *Medical Care Research and Review,* 45 (1)**,** 49.

Cornell, J. (1996). Aspects of the management of change. *Journal of Management in Medicine,* 10 (2)**,** 23-30.

Corrigan, J. M., Donaldson, M. S., Kohn, L. T., Maguire, S. K. and Pike, K. C. (2001). Crossing the quality chasm: A new health system for the 21st century. Washington, DC: The Institute of Medicine.

Coulter, A. (2006). *Engaging patients in their healthcare,* Oxford, UK, Picker Institute Europe.

Coutts, J. and Thornhill, J. (2009). Service-based funding and pay for performance: Will incentive payments give Canadian healthcare the quality boost it needs? *Healthcare Quarterly,* 12 (3)**,** 42-49.

Crawley, D., Ng, A., Mainous Iii, A. G., Majeed, A. & Millett, C. (2009). Impact of P4P on quality of chronic disease management by social class group in England. *J R Soc Med,* 102**,** 103-107.

Crosson, J. C., Ohman-Strickland, P. A., Campbell, S., Phillips, R. L., Roland, M. O., Kontopantelis, E., Bazemore, A., Balasubramanian, B. and Crabtree, B. F. (2009). A comparison of chronic illness care quality in US and UK family medicine practices prior to pay-for-performance initiatives. *Family Practice,* 26**,** 510-516.

Cummings, T. G. & Worley, C. G. (2008). *Organization development & change [with online access code]*, South-Western Pub.

Cupples, M. E., Byrne, M. C., Smith, S. M., Leathem, C. S. & Murphy, A. W. (2008). Secondary prevention of cardiovascular disease in different primary healthcare systems with and without pay-for-performance. *Heart,* 94 (12)**,** 1594.

Cutler, T. W., Palmieri, J., Khalsa, M. and Stebbins, M. (2007). Evaluation of the relationship between a chronic care management program and California pay-for-performance diabetes care cholesterol measures in one medical group. *J Manag Care Pharm,* 13**,** 578-88.

Daft, R. L. and Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *The Academy of Management Review,* 9 (2)**,** 284-295.

Dalton, D. R. and Kesner, I. F. (1983). Inside/outside succession and organizational size: The pragmatics of executive replacement. *The Academy of Management Journal,* 26 (4)**,** 736-742.

Damberg, C. L., Raube, K. and Teleki, S. S. (2009). Taking stock of pay-for-performance: A candid assessment from the front lines. *Health Affairs,* 28 (2)**,** 517.

Darke, P., Shanks, G. and Broadbent, M. (1998). Successfully completing case study research: Combining rigour, relevance and pragmatism. *Information Systems Journal,* 8 (4)**,** 273-289.

David, P. A. (1997). Path dependence and the quest for historical economics: One more Chorus of the ballad of Qwerty. *Discussion Papers in Economics and Social History No. 20.* Oxford: University of Oxford.

Day, P. and Klein, R. (1986). Controlling the gatekeepers: The accountability of general practitioners. *Journal of the Royal College of General Practitioners,* 36 (March)**,** 129-130.

Denham, A. (2003). Public services. *In:* Dunleavy, P., Gamble, A., Heffernan, R. and Peele, G. (eds.) *Developments in British politics 7.* Basingstoke, UK: Palgrave,

Denzin, N. K. & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. *In:* Denzin, N. K. & Lincoln, Y. S. (eds.) *The sage handbook of qualitative research.* 3rd Edition. Thousand Oak, California: SAGE Publications, Inc.

DHSS (1972). National health service reorganisation: England. London: Department of Health and Social Service.

Dierickx, I. and Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science,* 35 (12)**,** 1504-1511.

Dixon, A. and Khachatryan (2010). A review of the public health impact of the Quality and Outcomes Framework. *Quality in Primary Care,* 18**,** 133-138.

DoH (1997). The new NHS: Modern, dependable. London: Department of Health. Available at: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsand statistics/Publications/PublicationsPolicyAndGuidance/DH_4008869

DoH (2002). National evaluation of first wave NHS personal medical services pilots: Summaries of findings from four research projects. *In:* Health, D. O. (ed.). London: The Stationary Office. Available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPoli cyAndGuidance/DH_4118851

DoH (2003). Investing in general practice: The new general medical services contract. London: Department of Health. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/docu ments/digitalasset/dh_4071967.pdf

DoH (2004a). Choosing health. *In:* Health, D. O. (ed.). London: The Stationary Office. Available at: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsand statistics/Publications/PublicationsPolicyAndGuidance/DH_4094550

DoH (2004b). The NHS improvement plan: Putting people at the heart of public services. London: Department of Health. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps /documents/digitalasset/dh_118572.pdf

DoH (2005a). Creating a patient-led NHS: Delivering the NHS improvement plan. *In:* Health, D. O. (ed.). London: Department of Health. Available at:

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/docu
ments/digitalasset/dh_4106507.pdf

DoH (2005b). Self-care - a real choice, self-care support - a real option. *In:* Health, D. O. (ed.). London: Department of Health. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/docu ments/digitalasset/dh_4101702.pdf

DoH (2006). Our health, our care, our say. *In:* Health, D. O. (ed.). London: The Stationary Office. Available at: http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/healthcare/ourhealtho urcareoursay/index.htm

DoH (2007). Departmental report 2007. London: Department of Health. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/docu ments/digitalasset/dh_074766.pdf

Doran, T. (2008). Lessons from early experience with pay for performance. *Disease Management and Health Outcomes,* 16**,** 66-77.

Doran, T., Campbell, S., Fullwood, C., Kontopantelis, E. and Roland, M. (2010). Performance of small general practices under the UK's Quality and Outcomes Framework. *British Journal of General Practice,* 60 (578)**,** e335-e344.

Doran, T., Fullwood, C., Gravelle, H., Reeves, D., Kontopantelis, E., Hiroeh, U. and Roland, M. (2006). Pay-for-performance programs in family practices in the united kingdom. *New England Journal of Medicine,* 355 (4)**,** 375.

Doran, T., Fullwood, C., Kontopantelis, E. & Reeves, D. (2008a). Effect of financial incentives on inequalities in the delivery of primary clinical care in England: Analysis of clinical activity indicators for the Quality and Outcomes Framework. *The Lancet,* 372 (9640)**,** 728-736.

Doran, T., Fullwood, C., Reeves, D., Gravelle, H. and Roland, M. (2008b). Exclusion of patients from the pay for performance targets by English physicians. *New England Journal of Medicine,* 359 (3)**,** 274-284.

Dosi, G., Nelson, R. R. and Winter, S. G. (2000). Introduction: The nature and dynamics of organizational capabilities. *In:* Dosi, G., Nelson, R. R. and Winter, S. G. (eds.) *The nature and dynamics of organizational capabilities.* Oxford: Oxford University Press, 1-22.

Downing, A., Rudge, G., Cheng, Y., Tu, Y. K., Keen, J. and Gilthorpe, M. (2007). Do the uk government's new Quality and Outcomes Framework (QOF) scores

adequately measure primary care performance? A cross sectional survey of routine healthcare data. *BMC Health Services Research,* 7**,** 166.

Drejer, A. (2000). Organisational learning and competence development. *Learning Organization, The,* 7 (4)**,** 206-220.

Drejer, A. (2001). How can we define and understand competencies and their development? *Technovation,* 21 (3)**,** 135-146.

Drejer, A. & Riis, J. O. (2000). Competence strategy. *Copenhagen: Børsens Forlag.*

Dudley, R. A., Frolich, A., Robinowitz, D. L., Talavera, J. A., Broadhead, P. and Luft, H. S. (2004). *Strategies to support quality-based purchasing: A review of the evidence*, Agency for Healthcare Research and Quality (US).

Duncan, R. B. and Weiss, A. (1979). Organizational learning: Implications for organizational design. *In:* Staw, B. (ed.) *Research in organizational behaviour.* Greenwich, CT: JAI Press, 75-123.

Dusheiko, M., Gravelle, H., Jacobs, R. and Smith, P. (2003). *The effects of budgets on doctors behaviour: Evidence from a natural experiment,* York, UK, Centre of Health Economics, The University of York.

Dutton, J. E. and Dukerich, J. M. (1991). Keeping an eye on the mirror: Image and identity in organizational adaptation. *Academy of Management Journal,* 34 (3)**,** 517-554.

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991). *Management research: An introduction,* London, SAGE Publications.

Eckert, P. and Mcconnell-Ginet, S. (1992). Think practically and look locally: Language and gender as community-based practice. *Annual review of anthropology,* 21 (1)**,** 461-488.

Edwards, A. and Neal, R. D. (2008). The effect of the new GMS contract on GP appointment provision in Wales: Postal questionnaire survey of practice managers. *BMC Research Notes,* 1 (1)**,** 117.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review,* 14 (4)**,** 532-550.

Elder, R., Kirkpatrick, M., Ramsay, W., Macleod, M., Guthrie, B., Sutton, M. & Watt, G. C. M. (2007). Measuring quality in primary medical services using data from spice. Edinburgh, Scotland: National Health Service Scotland.

Eleftheriou, G. and Tang, S. (2010). Hypertension-control in primary care. *The Online Journal of Clinical Audits,* 2 (2)**,** 23-39.

Elliot-Smith, A. and Morgan, M. A. J. (2010). How do we compare?: Applying UK pay for performance indicators to an Australian general practice. *Australian family physician,* 39 (1-2)**,** 43-48.

Elliot, J. (2006). *Using narrative in social research: Qualitative and quantitative approaches,* London, SAGE Publications, Inc.

Epstein, A. M. (2006). Paying for performance in the United States and abroad. *The New England journal of medicine,* 355 (4)**,** 406.

Fagan, P. J., Schuster, A. B., Boyd, C., Marsteller, J. A., Griswold, M., Murphy, S. M., Dunbar, L. and Forrest, C. B. (2010). Chronic care improvement in primary care: Evaluation of an integrated pay-for-performance and practice-based care coordination program among elderly patients with diabetes. *Health Services Research,* 45 (6), 1763-1782.

Falaschetti, E., Campbell, N. R. C., Mohan, S. and Poulter, N. (2009a). Implementation of pay for performance policy in England. *Hypertension,* 54 (1)**,** e5.

Falaschetti, E., Chaudhury, M., Mindell, J. and Poulter, N. (2009b). Continued improvement in hypertension management in England: Results from the health survey for England 2006. *Hypertension,* 53**,** 480-486.

Favela, J. (1997). Capture and dissemination of specialized knowledge in network organizations. *Journal of Organizational Computing and Electronic Commerce,* 7 (2-3)**,** 201-226.

Featherstone, H. and Evans, N. (2010). Controlling public spending: The NHS in a period of tight funding. Research note. *Policy Exchange,* January.

Feldman, M. S. (2000). Organizational routines as a source of continuous change. *Organization Science,* 11 (6)**,** 611-629.

Feldman, M. S. and Rafaeli, A. (2002). Organizational routines as sources of connections and understandings. *Journal of Management Studies,* 39 (3)**,** 309-331.

Felt-Lisk, S., Gimm, G. and Peterson, S. (2007). Making pay for performance work in Medicaid. *Health Affairs,* 26 (4)**,** 516-527.

Ferlie, E. (1996). *The new public management in action*, Oxford University Press, USA.

Ferlie, E. B. and Shortell, S. M. (2001). Improving the quality of health care in the United Kingdom and the United States: A framework for change. *The Milbank Quarterly,* 79 (2)**,** 281-315.

Ferman, J. H. (2004). Pay for performance gaining popularity. *Healthcare Executive,* 19 (4)**,** 50.

Fiedler, M. and Welpe, I. (2010). How do organizations remember? The influence of organizational structure on organizational memory. *Organization Studies,* 31 (4)**,** 381-407.

Fisher, E. S. (2006). The paradox of plenty: Implications for performance measurement and pay for performance. *Managed care (Langhorne, Pa.),* 15 (10 Suppl 8)**,** 3.

Fleetcroft, R., Parekh-Bhurke, S., Howe, A., Cookson, R., Swift, L. and Steel, N. (2010). The UK pay-for-performance programme in primary care: Estimation of population mortality reduction. *British Journal of General Practice,* 60 (578)**,** e345-e352.

Fleetcroft, R., Steel, N., Cookson, R. & Howe, A. (2008). " Mind the gap!" Evaluation of the performance gap attributable to exception reporting and target thresholds in the new GMS contract: National database analysis. *BMC Health Services Research,* 8 (1)**,** 131.

Ford, J. D. and Ford, L. W. (1995). The role of conversations in producing intentional change in organizations. *Academy of Management Review,* 20 (3)**,** 541-570.

Franks, P., Clancy, C. M. and Nutting, P. A. (1992). Gatekeeping revisited--protecting patients from overtreatment. *The New England journal of medicine,* 327 (6)**,** 424.

Fraser, S. W. and Greenhalgh, T. (2001). Complexity science: Coping with complexity: Educating for capability. *British Medical Journal,* 323 (7316)**,** 799.

Fredrickson, J. W. (1986). The strategic decision process and organizational structure. *Academy of Management Review,* 11 (2)**,** 280-297.

Friedberg, M. W., Hussey, P. S. and Schneider, E. C. (2010). Primary care: A critical review of the evidence on quality and costs of health care. *Health Affairs,* 29 (5)**,** 766.

Friedberg, M. W., Safran, D. G., Coltin, K., Dresser, M. and Schneider, E. C. (2010). Paying for performance in primary care: Potential impact on practices and disparities. *Health Affairs,* 29 (5)**,** 926.

Gagliardi, P. (1986). The creation and change of organizational cultures: A conceptual framework. *Organization Studies,* 7 (2)**,** 117-134.

Gagné, M., Koestner, R. and Zuckerman, M. (2000). Facilitating acceptance of organizational change: The importance of self-determination. *Journal of Applied Social Psychology,* 30 (9)**,** 1843-1852.

Galtung, J. (1969). *Theory and methods of social research,* London, George Allen & Unwin, Ltd.

Garside, P. (1998). Organisational context for quality: Lessons from the fields of organisational development and change management. *Quality in Health Care,* 7**,** 8-15.

Gemmell, I., Campbell, S., Hann, M. and Sibbald, B. (2009). Assessing workload in general practice in England before and after the introduction of the P4P contract. *Journal of Advanced Nursing,* 65 (3)**,** 505-515.

George, A. L. & Bennett, A. (2005). *Case studies and theory development in the social sciences,* Massachussetts, The MIT Press.

Gersick, C. J. G. and Hackman, J. R. (1990). Habitual routines in task-performing groups* 1. *Organizational behaviour and human decision processes,* 47 (1)**,** 65-97.

Gherardi, S. and Nicolini, D. (2000). To transfer is to transform: The circulation of safety knowledge. *Organization,* 7 (2)**,** 329.

Gillham, B. (2000). *Case study research methods,* London, Continuum.

Gilmore, A. S., Zhao, Y., Kang, N., Ryskina, K., Legoretta, A. P., Taira, D. A. and Chung, R. S. (2007). Patient outcomes and evidence-based medicine in a preferred provider organization setting: A six-year evaluation of a physician pay for performance program. *Health Services Research,* 42 (6)**,** 2140-2158.

Gioia, D. A., Schultz, M. and Corley, K. G. (2000). Organizational identity, image, and adaptive instability. *The Academy of Management Review,* 25 (1)**,** 63-81.

Glickman, S. W., Schulman, K. A., Peterson, E. D., Hocker, M. B. & Cairns, C. B. (2008). Evidence-based perspectives on P4P and quality of patient care and outcomes in emergency medicine. *Annals of emergency medicine,* 51 (5)**,** 622-631.

Glisson, C. A. and Martin, P. Y. (1980). Productivity and efficiency in human service organizations as related to structure, size, and age. *Academy of Management Journal,* 23 (1)**,** 21-37.

Goodwin, N., Dixon, J., Feely, D. and Ham, C. (2008). Country case study: UK primary care in England and Scotland. *Conference on Improving primary Care in Europe and the US: Towards Patients-Centered, Proactive, and Coordinated Systems of Care., The Rockefeller Foundation Bellagio Study and Conference Centre, Italy, April 2-6.*

Gosden, T., Williams, J., Petchey, R., Leese, B. and Sibbald, B. (2002). Salaried contracts in UK general practice: A study of job satisfaction and stress. *Journal of Health Services Research & Policy,* 7 (1)**,** 26.

GPC-BMA (2004). The new GMS contract explained: Focus on sale of goodwill. London: General Practitioners Committee - British Medical Association. Available at: http://www.lmc.org.uk/uploads/files/focus%20on%20guidance/focusonsaleofgoodwill.pdf

Grant, S., Huby, G., Watkins, F., Checkland, K., Mcdonald, R., Davies, H. and Guthrie, B. (2008). The impact of pay for performance on professional boundaries in UK general practice: An ethnographic study. *Sociology of Health and Illness,* 31 (2)**,** 229-245.

Grant, S., Huby, G., Watkins, F., Checkland, K., Mcdonald, R., Davies, H. and Guthrie, B. (2009). The impact of pay for performance on professional boundaries in UK general practice: An ethnographic study. *Sociology of Health and Illness,* 31 (2)**,** 229-245.

Gravelle, H., Sutton, M. and Ma, A. (2007). Doctor behaviour under a pay for performance contract: Evidence from the Quality and Outcomes Framework. *Working Papers.*

Gravelle, H., Sutton, M. and Ma, A. (2009). Doctor behaviour under a pay for performance contract: Treating, cheating and case finding? *The Economic Journal,* 120 (542)**,** F129-F156.

Greene, S. E. and Nash, D. B. (2008). Pay for performance: An overview of the literature. *American Journal of Medical Quality,* 24 (2)**,** 140-163.

Greene, S. E. and Nash, D. B. (2009). Pay for performance: An overview of the literature. *American Journal of Medical Quality,* 24 (2)**,** 140-163.

Greener, I. and Mannion, R. (2006). Problems of fundholding. *British Medical Journal,* 333**,** 1168-1170.

Greener, I. and Mannion, R. (2008). Will practice-based commissioning in the English NHS resolve the problems experienced by GP fundholding? *Public Money & Management,* 28 (4)**,** 231.

Griffin, S. and Graffy, J. (2009). Blood glucose in type 2 diabetes: New QOF glycaemia targets are achievable and evidence based. *British Medical Journal,* 338 (b1915)**,** 1159.

Griffiths, P., Murrells, T., Maben, J., Jones, S. and Ashworth, M. (2010). Nurse staffing and quality of care in UK general practice: Cross-sectional study using routinely collected data. *British Journal of General Practice,* 60 (570)**,** e36-e48.

Groenewegen, P. P. and Hutten, J. B. F. (1991). Workload and job satisfaction among general practitioners: A review of the literature. *Social Science & Medicine,* 32 (10)**,** 1111-1119.

Gulliford, M. C., Ashworth, M., Robotham, D. and Mohiddin, A. (2007). Achievement of metabolic targets for diabetes by English primary care practices under a new system of incentives. *Diabetic Medicine,* 24**,** 505-511.

Gumport, P. J. (2000). Academic restructuring: Organizational change and institutional imperatives. *Higher Education,* 39**,** 67-91.

Guthrie, B., Mclean, G. and Sutton, M. (2006). Workload and reward in the Quality and Outcomes Framework of the 2004 general practice contract. *The British Journal of General Practice,* 56 (532)**,** 836.

Hage, J. T. (1999). Organizational innovation and organizational change. *Annual Review of Sociology,* 25 (1)**,** 597-622.

Hahn, J. (2006). Pay-for-performance in health care. *CRS Report for Congress.* Washington: Congressional Research Service - The Library of Congress.

Hall, D. J. and Saias, M. A. (1980). Strategy follows structure! *Strategic management journal,* 1 (2)**,** 149-163.

Hall, R. H., Johnson, N. J. and Haas, J. E. (1967). Organizational size, complexity, and formalization. *American Sociological Review,* 32 (6)**,** 903-912.

Hamlin, B., Keep, J. and Ash, K. (2000). *Organizational change and development: A reflective guide for managers, trainers, and developers,* Harlow, Financial Times Prentice hall.

Hanvanich, S., Sivakumar, K. and M. Hult, G. T. (2006). The relationship of learning and memory with organizational performance: The moderating role of turbulence. *Journal of the Academy of Marketing Science,* 34 (4)**,** 600-612.

Hardy, C. (1996). Understanding power: Bringing about strategic change. *British Journal of Management,* 7 (Special Issue)**,** S3-S16.

Hatch, M. J. & Schultz, M. (2004). Introduction. *In:* Hatch, M. J. and Schultz, M. (eds.) *Organizational identity: A reader.* Oxford, UK: Oxford University Press,

Hawawini, G., Subramanian, V. and Verdin, P. (2003). Is performance driven by industry or firm specific factors? A new look at the evidence. *Strategic management journal,* 24 (1)**,** 1-16.

Hearnshaw, H., Baker, R. and Cooper, A. (1998). A survey of audit activity in general practice. *The British Journal of General Practice,* 48 (427)**,** 979-981.

Heiman, B. and Nickerson, J. A. (2002). Towards reconciling transaction cost economics and the knowledge-based view of the firm: The context of interfirm collaborations. *International Journal of the Economics of Business,* 9 (1)**,** 97-116.

Heitman, E. & Mckieran, L. C. (2010). *Module 4 - community-based practice and research: Collaboration and sharing power* [Online]. Texas, USA: Association of Schools of Public Health. Available: http://www.asph.org/UserFiles/Module4.pdf [Accessed June 12, 2010].

Heward, S., Hutchins, C. and Keleher, H. (2007). Organizational change--key to capacity building and effective health promotion. *Health Promot. Int.,* 22 (2)**,** 170-178.

Hill, C. W. L. & Jones, G. R. (2009). *Theory of strategic management with cases,* London, South-Western CENGAGE Learning.

Hippisley-Cox, J., Vinogradova, Y. and Coupland, C. (2006). Time series analysis for selected clinical indicators from the Quality and Outcomes Framework 2001-2006. Available at: http://www.qresearch.org/Public_Documents/Time%20Series%20Analysis%20for%20selected%20clinical.pdf

HMSO (1987). Primary health care: An agenda for discussion. *In:* Secretary of the State for Social Services, W., Northern Ireland, and Scotland (ed.). London: HMSO. Available at: http://trove.nla.gov.au/work/11967569?selectedversion=NBD4882324

HMSO (1989). Working for patients. *In:* Government, T. U. (ed.). London: Her Majesty's Stationary Office.

Huber, G. P. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science,* 2 (1)**,** 88-115.

Huber, G. P., Miller, C. C. and Glick, W. H. (1990). Developing more encompassing theories about organizations: The centralization-effectiveness relationship as an example. *Organization Science***,** 11-40.

Huby, G., Guthrie, B., Grant, S., Watkins, F., Checkland, K., Mcdonald, R. and Davies, H. (2008). Whither British general practice after the 2004 GMS contract? Stories and realities of change in four UK general practices. *Journal of Health Organisation and Management,* 22 (1)**,** 63-78.

Hurst, D. K. and Zimmerman, B. J. (1994). From life cycle to ecocycle. *Journal of Management Inquiry,* 3 (4)**,** 339-354.

Iles, V. and Sutherland, K. (2001). Organisational change: A review for health care managers, professionals and researchers. London: National Co-ordinating Centre for NHS Service Delivery and Organisation R&D - London School of Hygiene and Tropical Medicine.

Investors_in_People. (2010). Investor in People - UK Commission for Employment and Skills London, UK. Available at: http://www.investorsinpeople.co.uk/About/PolicyDevelopment/Pages/default.aspx [Accessed June 15 2010].

Israel, B., Checkoway, B., Schultz, A. and Zimmerman, M. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational, and community control. . *Health Education Quarterly,* 21 (2)**,** 149-170.

Johnson, A. K. (1998). The revitalization of community practice: Characteristics, competencies, and curricula for community-based services. *Journal of Community Practice,* 5 (3)**,** 37-62.

Johnson, G. (1987). *Strategic change and the management process, ,* Oxford, Basil Blackwell.

Johnson, G. (1992). Managing strategic change- strategy, culture and action. *Long Range Planning,* 25 (1)**,** 28-36.

Johnson, G., Scholes, K. and Whittington, R. (2008). *Exploring corporate strategy: Text & cases*, Prentice Hall.

Johnston, C. & Fellow, F. (2005). Strategies for achieving change in general practices, report of a study trip to England. The World Health Organisation: Victoria University.

Kahn, J. M., Scales, D. C., Au, D. H., Carson, S. S., Curtis, J. R., Dudley, R. A., Iwashyna, T. J., Khrisnan, J. A., Maurer, J. R., Mularski, R., Popovich, J. J.,

Rubenfeld, G. D., Sinuff, T. and Heffner, J. E. (2010). An official American thoracic society policy statement: Pay-for-performance in pulmonary, critical care, and sleep medicine. *American Journal of Respiratory Critical Care Medicine,* 181**,** 752-761.

Karsten, H. (1999). Relationship between organizational form and organizational memory: An investigation in a professional service organization. *Journal of Organizational Computing and Electronic Commerce,* 9 (2)**,** 129-150.

Katz, D. & Kahn, R. L. (1978). The social psychology of organizations. USA and Canada, 2nd Edition. John Wiley &Sons. Inc.

Kay, A. (2002). The abolition of the GP fundholding scheme: A lesson in evidence-based policy making. *The British Journal of General Practice,* 52 (475)**,** 141.

Kimmel, K. C., Sensmeier, J. and Reeves, R. (2005). Pay for performance: An economic imperative for clinical information systems. *Healthc Inf Manag***,** 1–10.

King, W. R. (2009). Knowledge management and organizational learning. *Knowledge Management and Organizational Learning***,** 3-13.

Kiran, T., Hutchings, A., Dhalla, I. A., Furlong, C. and Jacobson, B. (2010). The association between quality of primary care, deprivation and cardiovascular outcomes: A cross-sectional study using data from the UK Quality and Outcomes Framework. *Journal of Epidemiology and Community Health,* 64 (10)**,** 927.

Kirsch, M. (2006). Pay-for-performance medicine-quality or quagmire? *American Journal of Gastroenterology,* 101 (11)**,** 2453-2455.

Klein, R. (2010). *The new politics of the NHS: From creation to reinvention,* Oxford, Radcliffe Publishing.

Koeck, C. (1998). Time for organisational development in healthcare organisations. *BMJ,* 317 (7168)**,** 1267-1268.

Kohn, L. T., Corrigan, J. M. & Donaldson, M. S. (2000). To err is human: Building a safer health system. A report of the committee on quality of health care in America. Washington, DC: Institute of Medicine.

Kouides, R. W., Bennett, N. M., Lewis, B., Cappuccio, J. D., Barker, W. H. and Laforce, F. M. (1998). Performance-based physician reimbursement and influenza immunization rates in the elderly the primary-care physicians of Monroe County. *American Journal of Preventive Medicine,* 14**,** 89-95.

Kozinets, C. A., Warren, R. W., Bersenth, C. L., Aday, L. A., Sachdeva, R. and Kirkland, R. T. (1999). Health status of children with special health care needs: Measurement issues and instruments. *Clin. Pediatr (Phila),* 38**,** 525-533.

Kristjanson, L. and Chalmers, K. (2007). Nurse-client interactions in community-based practice: Creating common ground. *Public Health Nursing,* 7 (4)**,** 215-223.

Kruse, S. D. (2003). Remembering as organizational memory. *Journal of educational Administration,* 41 (4)**,** 332-347.

Landon, B. E. and Normand, S. T. (2008). Performance measurement in the small office practice: Challenges and potential solutions. *Annals of Internal Medicine,* 148 (5)**,** 353-357.

Lawrence, P. R. and Lorsch, J. W. (1967). Differentiation and integration in complex organizations. *Administrative Science Quarterly,* 12 (1)**,** 1-47.

Lee, T. T., Cheng, S. H., Chen, C. C. and Lai, M. S. (2010). A pay-for-performance program for diabetes care in Taiwan: A preliminary assessment. *The American Journal of Managed Care,* 16 (2)**,** 65-69.

Leech, P. (2008). QOF management guide volume 1. London: NHS Primary Care Contracting.

Leese, B. (2007). New opportunities for nurses and other healthcare professionals? A review of the potential impact of the new GMS contract on the primary care workforce. *Journal of Health Organization and Management,* 20 (6)**,** 525-536.

Leese, B. and Petchey, R. (2003). Achievements of the first wave personal medical services (PMS) pilots in England. *Journal of Health Organisation and Management,* 17 (3)**,** 181-193.

Lei, D., Hitt, M. A. and Bettis, R. (1996). Dynamic core competences through meta-learning and strategic context. *Journal of Management,* 22 (4)**,** 549.

Lester, H. and Majeed, A. (2008). The future of the Quality and Outcomes Framework. *BMJ,* 337.

Levin-Scherz, J., Devita, N. and Timbie, J. (2006). Impact of pay-for-performance contracts and network registry on diabetes and asthma HEDIS measures in an integrated delivery network. *Medical Care Research and Review,* 63 (1 Supplement)**,** 14S - 28S.

Levitt, B. and March, J. G. (1988). Organizational learning. *Annual Review of Sociology,* 14**,** 319-340.

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry,* Beverly Hills, California, SAGE Publications.

Lliffe, S. and Freudenstein, U. (1994). Fundholding: From solution to problem. *British Medical Journal,* 308**,** 3.

Locke, R. G. and Srinivasan, M. (2008). Attitudes toward pay-for-performance initiatives among primary care osteopathic physicians in small group practices. *Journal of American Osteophatic Association,* 108 (1)**,** 21-24.

Lukas, C. V. D., Holmes, S. K., Cohen, A. B., Restuccia, J., Cramer, I. E., Shwartz, M. and Charns, M. P. (2007). Transformational change in health care systems: An organizational model. *Health care management review,* 32 (4)**,** 309-320.

Luke, R. D., Begun, J. W. and Walston, S. L. (1994). Strategy making in health care organizations. *In:* Shortell, S. M. and Kaluzny, A. D. (eds.) *Health care management: Organization design and behaviour.* New York: Thomson Delmar Learning, 355-391.

Mabotuwana, T., Warren, J., Elley, C. R., Kennely, J., Paton, C., Warren, D., Wai, K. C. and Wells, S. (2010). Use of internal based quality indicators in blood pressure management to enhance quality of pay for performance incentives: Comparison to two indicators from the Quality and Outcomes Framework. *Quality in Primary Care,* 18**,** 93-101.

Macbride-Stewart, S., Elton, R. and Walley, T. (2008). Do quality incentives change prescribing in primary care? An observational study in Scotland. *Family Practice,* 25 (1)**,** 27-32

Maisey, S., N. , Steel, M., R., Gillam, S., Fleetcroft, R. and Howe, A. (2008). Effects of payment for performance in primary care: Qualitative interview study. *Journal of Health Services Research Policy,* 13 (3)**,** 133-139.

Mandel, K. E. and Kotagal, U. R. (2007). P4P alone cannot drive quality. *Arch Pediatr Adolesc Med,* 161 (7)**,** 650-655.

Mannion, R. and Davies, H. (2008a). Payment for performance in health care. *British Medical Journal,* 336 (7639)**,** 306.

Mannion, R. & Davies, H. T. O. (2008b). Incentives in health systems: Developing theory, investigating practice. *Journal for Health Organisation and Management,* 22 (1)**,** 5-10.

Marchment, M. and Hoffmeyer, U. (1993). Towards a formalization of quality in health care contracts. *Health services management research: an official journal of the*

Association of University Programs in Health Administration/HSMC, AUPHA, 6 (4)**,** 229.

Marshall, M. and Harrison, S. (2005). It's about more than money: Financial incentives and internal motivation. *British Medical Journal,* 14 (1)**,** 4.

Martin, S., Smith, P. C., Dusheiko, M., Gravelle, H. and Rice, N. (2010). Evidence: Do quality improvements in primary care reduce secondary care costs? London: Department of Health and The Health Foundation

Mason, J. (2002). *Qualitative researching,* London, SAGE Publications, Inc.

Mays, N. and Pope, C. (1995). Qualitative research: Rigour and qualitative research. *British Medical Journal,* 311**,** 109-112.

Mccarlie, J. E. R., Reid, E. and Brady, A. J. (2007). Audit of the new GMS contract Quality and Outcomes Framework: Raising standards in CHD. *British Journal of Cardiology,* 14 (2)**,** 117-120.

Mcdonald, R., Checkland, K., Harrison, S. and Coleman, A. (2009). Rethinking collegiality: Restratification in English general medical practice 2004-2008. *Social Science & Medicine,* 68 (7)**,** 1199-1205.

Mcdonald, R., Harrison, S. and Checkland, K. (2008). Incentives and control in primary health care: Findings from English pay-for-performance case studies. *Journal of Health Organization and Management,* 22 (1)**,** 48-62.

Mcdonald, R., Harrison, S., Checkland, K. and Campbell, S. (2008). Identity, contract and enterprise in a primary care setting: An English general practice case study. *Organization,* 15 (3)**,** 355.

Mcdonald, R., Harrison, S., Checkland, K., Campbell, S. M. and Roland, M. (2007). Impact of financial incentives on clinical autonomy and internal motivation in primary care: Ethnographic study. *BMJ,* 334 (7608)**,** 1357-.

Mcdonald, R. & Roland, M. (2009). Pay for performance in primary care in England and California: Comparison of unintended consequences. *Annals of Family Medicine,* 7 (2)**,** 121-127.

Mcgovern, M. P., Boroujerdi, M. A., Taylor, M. W., Williams, D. J., Hannaford, P. C., Lefevre, K. E. and Simpson, C. R. (2007). The effect of the UK incentive-based contract on the management of patients with coronary heart disease in primary care. *Family Practice***,** 1-7.

Mclean, G., Sutton, M. and Guthrie, B. (2006). Deprivation and quality of primary care services: Evidence for persistence of the inverse care law from the UK Quality and Outcomes Framework. *British Medical Journal,* 60 (11)**,** 917.

Mehrotra, A., Pearson, S. D., Coltin, K. L., Kleinman, K. P., Singer, J. A., Rabson, B. and Schneider, E. C. (2007). The response of physician groups to P4P incentives. *The American Journal of Managed Care,* 13 (5)**,** 249-255.

Menachemi, N., Struchen-Shellhorn, W., Brooks, R. and Simpson, L. (2009). Influence of P4P programs on information technology use among child health providers: The devil is in the details. *Pediatrics,* 123**,** S92-S96.

Meterko, M. Y., Gary, J., White, B., Bokhour, B. G., Burgess Jr, J. F., Berlowitz, D., Guldin, M. R. and Nealon Siebert, M. (2006). Provider attitudes toward pay-for-performance programs: Development and validation of a measurement instrument. *Health Services Research,* 41 (5)**,** 1959-1978

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*, SAGE publications, Inc.

Miles, R. E. & Snow, C. C. (2003). *Organizational strategy, structure, and process,* California, Stanford University Press.

Miles, R. E., Snow, C. C., Meyer, A. D. and Coleman, H. J., Jr. (1978). Organizational strategy, structure, and process. *The Academy of Management Review,* 3 (3)**,** 546-562.

Millenson, M. L. (1999). *Demanding medical excellence: Doctors and accountability in the information age: With a new afterword*, University of Chicago Press.

Miller, M. E. (2005). Pay for performance in Medicare. *Statement of Mark E. Miller, Ph.D., Executive Director, Medicare Payment Advisory Commission, before the Committee on Finance, US Senate on July 27, 2005.*

Millet, C., Saxena, S., Netuveli, G. and Majeed, A. (2009). Impact of P4P on ethnic disparities in intermediate outcomes for diabetes: A longitudinal study. *Diabetes Care,* 32 (3)**,** 404-409.

Miner, A. S. (1991). Organizational evolution and the social ecology of jobs. *American Sociological Review,* 56 (6)**,** 772-785.

Mintzberg, H. (1978). Patterns in strategy formation. *Management Science,* 24 (9)**,** 934-948.

Mintzberg, H. (1979). *The structuring of organizations,* Englewood Cliffs, NJ, Prentice-Hall.

Moorman, C. and Miner, A. S. (1998). Organizational improvisation and organizational memory. *Academy of Management Review,* 23 (4)**,** 698-723.

Moran, J. W. and Brightman, B. K. (2000). Leading organizational change. *Journal of Workplace Learning,* 12 (2)**,** 66-74.

Morgan, G. (2006). *Images of organization*, Sage Publications, Inc.

Moser, J. W., Wilcox, P. A., Bjork, S. S., Cushing, T., Dennis, M., Greissing, J. E., Keysor, K., Mckenzie, J. and Weinreb, J. C. (2006). Pay for performance in radiology: ACR white paper. *Journal of the American College of Radiology,* 3 (9)**,** 650-664.

Mousa, F.-T. and Lemak, D. J. (2009). The Gilbreths' quality system stands the test of time. *Journal of Management History,* 15 (2)**,** 198-215.

Mullen, K. J., Frank, R. G. and Rosenthal, M. B. (2010). Can you get what you pay for? Pay-for-performance and the quality of healthcare providers. *The RAND Journal of Economics,* 41 (1)**,** 64-91.

Munkvold, G., Ellingsen, G. and Koksvik, H. (Year) Published. Formalizing work: Reallocating redundancy. The 20th Anniversary Conference on Computer Supported Cooperative Work, 2006 Banff, Alberta, Canada. The ACM Digital Library, 68.

Murphy, E., Dingwall, R., Greatbatch, D., Parker, S. and Watson, P. (1998). Qualitative research methods in health technology assessment: A review of the literature. *Health Technology Assessment,* 2 (16).

Nadler, D. A. and Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *The Academy of Management Executive (1987-1989),* 3 (3)**,** 194-204.

Nadworny, M. J. (1957). Frederick Taylor and frank Gilbreth: Competition in scientific management. *The Business History Review,* 31 (1)**,** 23-34.

NAO (2008). NHS pay modernisation: New contracts for general practice services in England. *In:* Office, N. A. (ed.). London: The Stationary Office. Available at: http://www.nao.org.uk/publications/0708/new_contracts_for_general_prac.aspx

Naoi, A. and Schooler, C. (1985). Occupational conditions and psychological functioning in Japan. *The American Journal of Sociology,* 90 (4)**,** 729-752.

Nelson, R. R. & Winter, S. G. (1982). *An evolutionary theory of economic change*, Belknap Press.

NHS-Employers & BMA (2007). Revisions to the GMS contract 2006/07: Delivering investment in general practice. *In:* Health, D. O. (ed.). London. Available at: http://www.nhsemployers.org/SiteCollectionDocuments/Revisions_to_the_GMS_contract_-_full_CD_120209.pdf

NHS-Modernisation-Board (2002). The NHS plan–a progress report. The NHS modernisation board's annual report, 2000-2001. Department of Health: London. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4064830.pdf

NHS_PCC (2009). QOF management guide. *In:* Commissioning, N. P. C. (ed.). London: Department of Health. Available at: http://www.pcc.nhs.uk/qof-management-guide

NHS_the_Information_Centre. (2005). National Quality and Outcomes Framework statistics for England 2004/05 [Online]. London: NHS-The Information Centre. Available at: http://www.ic.nhs.uk/webfiles/publications/qof0405/QOF0405_Statistical_Bulletin.pdf [Accessed October 10, 2008.

NHS_the_Information_Centre. (2006). The Quality and Outcomes Framework 2006/2007 [Online]. London: NHS-The Information Centre. Available at: http://www.ic.nhs.uk/statistics-and-data-collections/audits-and-performance/the-quality-and-outcomes-framework/the-quality-and-outcomes-framework-2006-07 [Accessed October 10, 2008.

NHS_the_Information_Centre. (2008). Quality and Outcomes Framework exception reporting statistics for England 2007/08 [Online]. London: NHS-The Information Centre. Available at: http://www.ic.nhs.uk/webfiles/QOF/2007-08/exceptionreport0708/national%20QOF%20framework%20exception%20reporting%20statistics%20for%20england%20200708.pdf [Accessed October 10, 2010.

NHS_the_Information_Centre. (2009). Quality and Outcomes Framework: Online GP practice results database 2009/2010 [Online]. London: NHS-The Information Centre. Available at: http://www.qof.ic.nhs.uk/ [Accessed October 10, 2010.

NHS_the_Information_Centre. (2010). Quality and Outcomes Framework achievement data 2009/2010 [Online]. London: NHS-The Information Centre. Available at: http://www.qof.ic.nhs.uk/ [Accessed April 1, 2011.

NICE. (2010). About the Quality and Outcome Framework (QOF). Available at: http://www.nice.org.uk/aboutnice/qof/qof.jsp [Accessed March 14, 2010].

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science,* 5 (1)**,** 14-37.

Office_of_Health_Economics (2007). How UK NHS expenditure and staffing has changed - rising UK birth rates and causes of increasing numbers of caesarean deliveries. London: Office of Health Economics. Available at: http://daphnecaruanagalizia.com/wp-content/uploads/2008/06/comp-press-release.pdf

Olivera, F. (2000). Memory systems in organizations: An empirical investigation of mechanisms for knowledge collection, storage and access. *Journal of Management Studies,* 37 (6)**,** 811-832.

Oluwatowoju, I., Abu, E., Wild, S. H. & Byrne, C. D. (2010). Improvements in glycaemic control and cholesterol concentrations associated with the Quality and Outcomes Framework: A regional 2-year audit of diabetes care in the UK. *Diabetic Medicine,* 27 (3)**,** 354-359.

Parkin, P. (2009). *Managing change in healthcare using action research,* London, SAGE Publication Ltd.

Paton, C. R. (1992). *Competition and planning in the NHS: The danger of unplanned markets,* London, Chapman & Hall.

Patton, M. Q. (2002). *Qualitative research and evaluation methods,* London, SAGE Publications, Inc.

Peach, E. B. & Wren, D. A. (1992). Pay for performance from antiquity to the 1950s. *In:* Hopkins, B. L. & Mawhinney, T. C. (eds.) *Pay for performance: History, controversy, and evidence.* London, UK: The Haworth Press, Inc.,

Pearson, S. D., Schneider, E. C., Kleinman, K. P., Coltin, K. L. and Singer, J. A. (2008). The impact of pay-for-performance on health care quality in Massachusetts 2001-2003. *Health Affairs,* 27 (4)**,** 1167-1176.

Peckham, S. (2007). The new general practice contract and reform of primary care in the united kingdom. *Healthcare Policy,* 2 (4)**,** 34-48.

Peckham, S., Exworthy, M., Powell, M. and Greener, I. (2007). Analysing health services: Decentralisation in the UK. *In:* Hann, A. (ed.) *Health policy and politics.* Aldershot, Hampshire: Ashgate Publishing, Ltd, 27-39.

Peckham, S. and Wallace, A. (2010). Pay for performance schemes in primary care: What have we learnt? *Quality in Primary Care,* 18 (2)**,** 111-116.

Pentecost, M. J. (2006). Pay –for-Performance: At Last or Alas? *The Permanente Journal* [Online], 10. Available: http://xnet.kp.org/permanentejournal/spring06/performance.html (discussing the roles of The Leapfrog Group and BET in the emergence of P4P) [Accessed October 10, 2007].

Pentland, B. T. and Reuter, H. H. (1994). Organizational routines as grammars of action. *Administrative Science Quarterly,* 39 (3).

Petersen, L. A., Woodard, L. C. D., Henderson, L. M., Urech, T. H. and Pietz, K. (2009). Will hypertension performance measures used for pay-for-performance programs penalize those who care for medically complex patients? *Circulation,* 119 (23)**,** 2978.

Petersen, L. A., Woodard, L. C. D., Urech, T., Daw, C. and Sookanan, S. (2006). Does pay-for-performance improve the quality of health care? *Annals of Internal Medicine,* 145 (4)**,** 265.

Petticrew, M. & Roberts, H. (2005). *Systematic reviews in the social sciences : A practical guide,* Malden, MA, Oxford Blackwell.

Pettigrew, A., Ferlie, E. and Mckee, L. (1992). Shaping strategic change--the case of the NHS in the 1980s. *Public Money & Management,* 12 (3)**,** 27-31.

Pettigrew, A. M. (2002). Strategy formulation as a political process. *In:* Faulkner, D. (ed.) *Strategy: Critical perspectives on business and management.* Routledge, 423-429.

Pfeffer, J. (1982). *Organizations and organization theory,* Boston, Pitman.

Pfeffer, J. (1997). *New directions for organization theory: Problems and prospects,* New York, Oxford University Press.

Pham, H. H., Schrag, D., O'mallet, A. S., Wu, B. and Bach, P. B. (2007). Care patterns in Medicare and their implications for P4P. *The New England journal of medicine,* 356 (11)**,** 1130-1139.

Plsek, P. E. and Greenhalgh, T. (2001). Complexity science: The challenge of complexity in health care. *BMJ,* 323 (7313)**,** 625-628.

Plsek, P. E. and Wilson, T. (2001). Complexity science: Complexity, leadership, and management in healthcare organisations. *BMJ: British Medical Journal,* 323 (7315)**,** 746.

Pollard, S. (1993). *The genesis of modern management: Study of industrial revolution in Great Britain,* Aldershot, England, Gregg Revivals.

Pollock, A. M. (2004). *NHS plc: The privatisation of our health care,* London, Verso.

Pope, C., Ziebland, S. and Mays, N. (2006). Analysing qualitative data. *In:* Pope, C. & Mays, N. (eds.) *Qualitative research in health care.* Oxford, UK: Blackwell Publishing.

Porter, M. E. and Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review,* 63 (4)**,** 149-160.

Postrel, S. (2002). Islands of shared knowledge: Specialization and mutual understanding in problem-solving teams. *Organization Science,* 13 (3)**,** 303-320.

Prahalad, C. K. & Hamel, G. (1990). The core competence of the corporation. *Harvard Business Review,* 68 (3)**,** 79-91.

Prahalad, C. K. & Hamel, G. (1996). *Competing for the future,* Boston, Massachusetts, Harvard Business School Press.

Prahalad, C. K. & Hamel, G. (2006). The core competence of the corporation. *Harvard Business Review,* 275-292. Available at: http://www1.ximb.ac.in/users/fac/Amar/AmarNayak.nsf/23e5e39594c064ee852 564ae004fa010/456e5a8383adcf07652576a0004d9ba5/$FILE/CoreCompetence .pdf

Propper, C., Wilson, D. and Söderlund, N. (1998). The effects of regulation and competition in the NHS internal market: The case of general practice fundholder prices. *Journal of Health Economics,* 17 (6)**,** 645-673.

Ragsdell, G. (2000). Engineering a paradigm shift? An holistic approach to organisational change management. *Journal of Organizational Change Management,* 13 (2)**,** 104-120.

RCGP. (2006). *Profile of UK general practitioners* [Online]. London: Royal College of General Practitioners. Available: http://www.rcgp.org.uk/InformationSheets [Accessed August 5, 2010.

Ritchie, J. & Spencer, L. (1996). Qualitative data analysis for applied policy research. *In:* Bryman, A. & Burgess, R. G. (eds.) *Analyzing qualitative data.* London: Routledge.

Robbins, S. (1990). *Organization theory: Structure, design, and applications,* New Jersey, Prentice Hall, Inc.

Roberts, J. (2007). *The modern firm: Organizational design for performance and growth,* Oxford, Oxford University Press.

Rodriguez, H. P., Von Glahn, T., Elliott, M. N., Rogers, W. H. and Safran, D. G. (2009). The effect of performance-based financial incentives on improving patient care experiences: A statewide evaluation. *Journal of General Internal Medicine,* 24 (12)**,** 1281-1288.

Roland, M. (2004). Linking physicians' pay to the quality of care-a major experiment in the united kingdom. *The New England journal of medicine,* 351 (14)**,** 1448.

Roland, M. (2011). Where did the Quality and Outcomes Framework come from? *In:* Gillam, S. & Siriwardena, A. N. (eds.) *The quality and Outcomes Framework: QOF transforming general practice.* Oxon, UK: Radcliffe Publishing Ltd., 8-15.

Roland, M., Campbell, S., Bailey, N., Whalley, D. and Sibbald, B. (2006). Financial incentives to improve the quality of primary care in the UK: Predicting the consequences of change. *Primary Health Care Research & Development,* 7 (1)**,** 18-26.

Roland, M., Elliott, M., Lyratzopoulos, G., Barbiere, J., Parker, R. A., Smith, P., Bower, P. and Campbell, J. (2009). Reliability of patient responses in pay for performance schemes: Analysis of national general practitioner patient survey data in England. *British Medical Journal,* 339 (sep29 3)**,** b3851.

Rollinson, D. & Broadfield, A. (2002). *Organisational behaviour and analysis. An integrated approach,* Essex, UK, Financial Times \ Prentice Hall.

Rosenthal, M. B. and Frank, R. G. (2006). What is the empirical basis for paying for quality in health care? *Med Care Res Rev,* 63 (2)**,** 135-157.

Rosenthal, M. B., Frank, R. G., Li, Z. and Epstein, A. M. (2005). Early experience with pay-for-performance: From concept to practice. *JAMA,* 294 (14)**,** 1788.

Rosenthal, M. B., Landon, B. E., Howitt, K., Ryusong, H. and Epstein, A. M. (2007). Climbing up the pay- for-performance learning curve: Where are the early adopters now? *Health Affairs,* (November-December)**,** 1674-1687.

Rosenthal, M. B., Landon, B. E., Normand, S.-L., Frank, R. G. and Epstein, A. M. (2006). Pay for performance in commercial HMSO. *The New England Journal of Medicine,* 335**,** 1895-1902.

Rowlinson, M., Booth, C., Clark, P., Delahaye, A. and Procter, S. (2010). Social remembering and organizational memory. *Organization Studies,* 31 (1)**,** 69-87.

Rulke, D. L., Zaheer, S. and Anderson, M. H. (2000). Sources of managers' knowledge of organizational capabilities. *Organizational behaviour and human decision processes,* 82**,** 134-149.

Rumelt, R. P. (1991). How much does industry matter? *Strategic management journal,* 12 (3)**,** 167-185.

Sachdeva, R. (2007). Electronic healthcare data collection and pay for performance: Translating theory into practice. *Annals Health L,* 16**,** 291-314.

Saxena, S., Car, J., Eldred, D., Soljak, M. and Majeed, A. (2007). Practice size, caseload, deprivation, and quality of care of patients with coronary heart disease, hypertension, and stroke in primary care: National cross-sectional study. *BMC Health Services Research,* 7**,** 96.

Scanlon, D. P. (2005). Evidence for pay for performance: Hope for the us health care system? *Supplement to Managed Care,* 14 (12)**,** 6-10.

Schatz, M., Blaiss, M., Green, G. and Aaronson, D. (2007). Pay for performance for the allergist-immunologist: Potential promise and problems. *Journal of allergy and clinical immunology,* 120 (4)**,** 769-775.

Scott, A. (2000). Economics of general practice. *In:* Newhouse, J. P. & Culyer, A. J. (eds.) *Handbook of health economics.* Amsterdam: Elsevier Science B.V,

Scott, A. and Hall, J. (1995). Evaluating the effects of GP remuneration: Problems and prospects. *Health policy (Amsterdam, Netherlands),* 31 (3)**,** 183.

Seddon, M. E., Marshall, M. N., Campbell, S. M. and Roland, M. O. (2001). Systematic review of studies of quality of clinical care in general practice in the UK, Australia and new Zealand. *Quality in Health Care,* 10 (3)**,** 152.

Seidel, R. L. and Nash, D. B. (2004). Paying for performance in diagnostic imaging: Current challenges and future prospects. *Journal of the American College of Radiology,* 1 (12)**,** 952-956.

Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization,* New York, Doubleday.

Senior, B. & Fleming, J. (2006). *Organizational change*, 3rd Edition, Financial Times\ Prentice Hall.

Sheaff, R. (2008). Medicine and management in English primary care: A shifting balance of power? *In:* Mckee, L., Ferlie, E. and Hyde, P. (eds.) *Organizing and reorganizing: Power and change in health care organizations.* Basingstoke, Hampshire: Palgrave Macmillan, 1-18.

Shen, Y. (2003). Selection incentives in a performance-based contracting system. *Health Services Research,* 38 (2)**,** 535-552.

Shortell, S. M. & Kaluzny, A. D. (2006). Organization theory and health services management. *In:* Shortell, S. M. & Kaluzny, A. D. (eds.) *Health care management: Organization design and behaviour.* 5th Edition. New York: Thomson Delmar Learning,

Shortell, S. M., Morrison, E. M. & Robbins, S. (1985). Strategy making in health care organizations: A framework and agenda for research. *Medical Care Research and Review,* 42 (2)**,** 219.

Sigfried, L. A., Turner, C., Crook, D. and Ray, S. (2006). Using the UK primary care Quality and Outcomes Framework to audit health care equity: Preliminary data on diabetes management. *Journal of Public Health,* 28 (3)**,** 221-225.

Silverman, M. (2005). *Doing qualitative research: A practical handbook,* London, SAGE Publications, Inc.

Simmons, L. E., Gates, M. F. and Thompson, T. L. (2000). Processing issues related to culture, gender orientation, and mentoring. *In:* Moch, S. D. & Gates, M. F. (eds.) *The researcher experience in qualitative research.* London: SAGE Publications, Inc., 83-93.

Simon, H. A. (1997). *Administrative behaviour,* New York, The Free Press.

Sine, W. D., Mitsuhashi, H. and Kirsch, D. A. (2006). Revisiting burns and stalker: Formal structure and new venture performance in emerging economic sectors. *Academy of Management Journal,* 49 (1)**,** 121.

Smith, P. C. & York, N. (2004). Quality incentives: The case of UK general practitioners. *Health Affairs,* 23 (3)**,** 112.

Srirangalingam, U., Sahathevan, S. K., Lasker, S. S. and Chowdhury, T. A. (2006). Changing pattern of referral to a diabetes clinic following implementation of the new UK GP contract. *British Journal of General Practice,* 56**,** 624-626.

Stake, R. E. (2005). Qualitative case study. *In:* Denzin, N. K. & Lincoln, Y. S. (eds.) *The sage handbook of qualitative research.* 3rd Edition. Thousand Oak, California: SAGE Publications, Inc,

Starfield, B. (1994). Is primary care essential? *Lancet,* 344 (8930)**,** 1129-1133.

Steel, N., Maisey, S., N., Clark, A., Fleetcroft, R. and Howe, A. (2007). Quality of clinical primary care and targeted incentive payments: An observational study. *British Journal of General Practice,* 57 (539)**,** 449-454.

Steel, N. and Willems, S. (2010). Research learning from the UK Quality and Outcomes Framework: A review of existing research. *Quality in Primary Care,* 18 (2)**,** 117-125.

Stein, E. W. (1995). Organization memory: Review of concepts and recommendations for management. *International Journal of Information Management,* 15 (1)**,** 17-32.

Stein, E. W. and Zwass, V. (1995). Actualizing organizational memory with information systems. *Information systems research,* 6**,** 85-117.

Stinchcombe, A. L. (1965). Social structure and organizations. *In:* March, J. (ed.) *Handbook of organizations.* Chicago: Rand McNally, 142-193.

Stoker, G. (1990). Government beyond whitehall. *In:* Dunleavy, P., Gamble, A. andPeele, G. (eds.) *Developments in British politics 3.* Basingstoke, UK: Macmillan Education, Ltd,

Street, C. T. and Gallupe, R. B. (2009). A proposal for operationalizing the pace and scope of organizational change in management studies. *Organizational Research Methods,* 12 (4)**,** 720.

Strong, M., South, G. and Carlisle, R. (2009). The UK Quality and Outcomes Framework pay-for-performance scheme and spirometry: Rewarding quality or just quantity? A cross-sectional study in Rotherham, UK. *BMC Health Services Research,* 9 (1)**,** 108.

Sutton, M., Elder, R., Guthrie, B. and Watt, G. C. M. (2009). Record rewards: The effects of targeted quality incentives on the recording of risk factors by primary care providers. *Health Economics,* 19 (1), 1-13.

Sutton, M., Ikenwilo, D. and Skatun, D. (2007). Evaluation of the introduction of a pay for performance contract for UK family doctors using participant perceptions. *University of York, HEDG Working Paper,* 7**,** 20.

Sutton, M. & Mclean, G. (2006). Determinants of primary medical care quality measured under the new UK contract: Cross sectional study. *British Medical Journal,* 332 (7538)**,** 389.

Swayne, L. C. (2005). Pay for performance: Pay more or pay less? *Journal of the American College of Radiology,* 2 (9)**,** 777-781.

Tahrani, A. A., Mccarthy, M., Godson, J., Taylor, S., Slater, H., Capps, N., Moulik, P. and Macleod, A. F. (2007). Diabetes care and the new GMS contract: The evidence for a whole county. *The British Journal of General Practice,* 57 (539)**,** 483.

Teleki, S. S., Damberg, C. L., Pham, C. and Berry, S. H. (2006). Will financial incentives stimulate quality improvements? Reactions from frontline physicians. *American Journal of Medical Quality,* 21**,** 367-375.

The_NHS_Information_Centre (2007). *2006/2007 UK general practice workload survey.* London: The Information Centre - Primary Care Statistics. Available at: http://www.ic.nhs.uk/pubs/gpworkload

The_NHS_Information_Centre. (2010). *Quality and Outcomes Framework: Online GP practice results database* [Online]. London: NHS. Available at: http://www.qof.ic.nhs.uk/ [Accessed May 9, 2010].

Town, R., Kane, R., Johnson, P. & Butler, M. (2005). Economic incentives and physicians' delivery of preventive care: A systematic review. *American Journal of Preventive Medicine,* 28 (2)**,** 234-240.

Tsai, C. Y., Lin, J. L. and Chen, C.-H. (2010). Core competence and core rigidity: Organizational memory perspective. Available at: http://www.isu.edu.tw/upload/28/3/29520/paper/9504/950408.pdf [Accessed October 4, 2010].

Vaghela, P., Ashworth, M., Schofield, P. and Gulliford, M. C. (2009). Population intermediate outcomes of diabetes under pay-for-performance incentives in England from 2004 to 2008. *Diabetes care,* 32 (3)**,** 427-429.

Van Den Heuvel, H., Mand, P., Heim, S. and Hummers-Pradier, E. (2010). Views of German general practitioners on the clinical indicators of the British Quality and Outcomes Framework: A qualitative study. *Quality in Primary Care,* 18 (2)**,** 85-92.

Van Der Bent, J., Paauwe, J. and Williams, R. (1999). Organizational learning: An exploration of organizational memory and its role in organizational change processes. *Journal of Organizational Change Management,* 12 (5)**,** 377-404.

Van Herck, P., De Smedt, D., Annemans, L., Remmen, R., Rosenthal, M. B. and Sermeus, W. (2010). Systematic review: Effects, design choices, and context of pay-for-performance in health care. *BMC Health Services Research,* 10 (1)**,** 247.

Vigoda-Gadot, E., Shoham, A., Schwabsky, N. & Ruvio, A. (2005). Public sector innovation for the managerial and the post-managerial era: Promises and realities in a globalizing public administration. *International public management journal,* 8 (1)**,** 57-81.

Walby, S. & Greenwell, J. (2004). *Medicine and nursing: Professions in a changing health service,* London, Sage Publications Ltd.

Walker, S., Mason, A. R., Claxton, K., Cookson, R., Fenwick, E., Fleetcroft, R. and Sculpher, M. (2010). Value for money and the Quality and Outcomes Framework in primary care in the UK NHS. *British Journal of General Practice,* 60 (574)**,** e213-e220.

Wally, S. and Baum, J. R. (1994). Personal and structural determinants of the pace of strategic decision making. *Academy of Management Journal***,** 932-956.

Walsh, J. P. and Ungson, G. R. (1991). Organizational memory. *Academy of Management Review,* 16 (1)**,** 57-91.

Wang, Y., O'donnell, C. A., Mackay, D. F. and Watt, G. C. M. (2006). Practice size and quality attainment under the new GMS contract: A cross-sectional analysis. *The British Journal of General Practice,* 56 (532)**,** 830.

Wasserman, N. (2008). Revisiting the strategy, structure, and performance paradigm: The case of venture capital. *Organization Science,* 19 (2)**,** 241.

Weick, K. E. (1979). *The social psychology of organizing*, Random House.

Weick, K. E. (1991). The non-traditional quality of organizational learning. *Organization Science,* 2 (1)**,** 116-124.

Weick, K. E. (2000). *Making sense of the organization*, Blackwell Publishing Ltd.

Weinberger, H., Te'eni, D. and Frank, A. J. (2008). Ontology based evaluation of organizational memory. *Journal of the American Society for Information Science and Technology,* 59 (9)**,** 1454-1468.

Weinberger, H., Te'eni, D. and Frank, A. (2003) Published. Ontologies of organizational memory as a basis for evaluation. The 11th European Conference of Information Systems. , 16-23 June 2003 Naples, Italy. London School of Economics.

Wensing, M., Van Den Hombergh, P., Van Doremalen, J., Grol, R. and Szecsenyi, J. (2009). General practitioners' workload associated to practice size rather than chronic care organisation. *Health Policy,* 89 (1)**,** 124-129.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal,* 5 (2)**,** 171-180.

Wetherell, M. S., Taylor, S. and Yates, S. J. (2001). *Discourse theory and practice: A reader,* London, SAGE Publications, Inc.

Whalley, D., Hugh and Sibbald, B. (2008). Effect of the new contract on GPs' working lives and perceptions of quality of care: A longitudinal survey. *British Journal of General Practice,* 58 (546)**,** 8-14.

Wijnhoven, F. (1998). Designing organizational memories: Concept and method. *Journal of Organizational Computing and Electronic Commerce,* 8 (1)**,** 29-55.

Wijnhoven, F. (1999). *Managing dynamic organizational memories: Instruments for knowledge management,* Enschede, The Netherlands, Twente University Press.

Williams, P. H. and Lusignan, S. D. (2006). Does a higher 'quality points' score mean better care in stroke? An audit of general practice medical records. *Informatics in Primary Care,* 14 (1)**,** 29-40.

Williams, T. R. (2006). Practical design and implementation considerations in pay for performance programs. *The American Journal of Managed Care,* 2 (2)**,** 77-80.

Williams, T. R., Raube, K., Damberg, C. L. and Mardon, R. E. (2006). Pay for performance: Its influence on the use of it in physician organizations. *J Med Pract Manage,* 21 (5)**,** 301-306.

Wilson, D. C. (1992). *A strategy of change: Concepts and controversies in the management of change,* London, Thomson.

Wilson, T., Buck, D. and Ham, C. (2005). Rising to the challenge: Will the NHS support people with long-term conditions? *British Medical Journal,* 330**,** 657-661.

Wilson, T., Holt, T. and Greenhalgh, T. (2001). Complexity science: Complexity and clinical care. *British Medical Journal,* 323 (7314)**,** 685.

Winjhoven, F. (1999). *Managing dynamic organizational memories: Instruments for knowledge management,* Enschede, The Netherland, Twente University Press.

Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic management journal,* 24 (10)**,** 991-995.

Wragg, E. C., Haynes, G. S., Wragg, C. M. and Chamberlin, R. P. (2004). *Performance pay for teachers: The experiences of heads and teachers,* London, UK, Routledge/ Falmer.

Wren, D. A. (2004). *The history of management thought,* New Jersey, John Wiley and Sons, Inc.

Wright, J., Martin, D., Cockings, S. and Polack, C. (2006). Overall Quality of Outcomes Framework scores lower in practices in deprived areas. *The British Journal of General Practice,* 56 (525)**,** 277.

Yin, R. K. (2009). *Case study research: Design and methods,* London, SAGE Publications.

Young, G. J., Burgess Jr, J. F. and White, B. (2007). Pioneering pay for quality: Lessons from the reviewing results demonstrations. *Health Care Financial Review,* 29 (1)**,** 59-70.

Young, G. J., Meterko, M., Beckman, H., Baker, E., White, B., Sautter, K. M., Greene, R. A., Curtin, K., Bokhour, B. G., Berlowitz, D. and Burgess Jr, J. F. (2007a). Effect paying physicians based on their relative. *Performance for Quality,* 22 (6)**,** 873-876.

Young, G. J., Meterko, M., White, B., Bokhour, B. G., Sautter, K. M., Berlowitz, D. and Burgess Jr, J. F. (2007b). Physician attitudes toward pay-for-quality programs: Perspectives from the front line. *Medical Care Research and Review,* 64 (3)**,** 331.

Zinn, J. S. and Mor, V. (1998). Organizational structure and the delivery of primary care to older Americans. *Health Services Research,* 33 (2 Pt 2)**,** 354-380.