Management Control in Spanish Public Hospitals: Healthcare Accreditation

by

Miguel Vega Pérez

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Supervisors: Professor Breda Sweeney

Doctor Geraldine Robbins

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Abstract

This study examines the operation of a mandatory healthcare accreditation system to achieve a better understanding of how an externally imposed system operates as a management control tool. Adopting a qualitative research approach, this study investigates the role and features of the acute care hospital accreditation system in two public hospitals in the Spanish region of Catalonia using the case study method. Data collection over a two year period consisted of in-depth interviews, observations and access to hospital documentation. The 'enabling & coercive' formalisation (Adler and Borys, 1996) framework is used to analyse and interpret the findings.

Overall, the study contributes to evolving our understanding of enabling/coercive features of formalisation of externally mandated control systems in the public sector context. The study reveals how the accreditation system has turned into a 'hybrid' model (Greenfield et al., 2016) that combines aspects of quality assurance and continuous quality improvement. Findings indicate the coexistence of coercive and enabling features of formalisation showing that both types of formalisation are not mutually exclusive. While managers perceive particular aspects of the system as coercive such as the limited autonomy to deviate from rules, they also emphasise its enabling features such as improved understanding of hospital processes due to enhanced transparency and greater teamwork. Certain features of formalisation (i.e., repair and flexibility) were found to have less relevance than in the context of an internal system and were viewed in a more neutral manner.

Findings point to a close relationship between enabling formalisation and positive attitudes and between coercive formalisation and negative attitudes. However, there was some evidence of differences emphasising the importance of distinguishing between managerial intentions (enabling/coercive formalisation) and employees' perceptions (positive, negative, and neutral attitudes) of controls (Tessier and Otley, 2012). In addition, the study illustrates that the coexistence of enabling/coercive features in the design and use of the accreditation system results in a combination of positive and negative attitudes of individuals consistent with an ambivalent orientation towards control systems (Ashforth et al., 2014).

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List of Acronyms & Abbreviations

A&E	Accident & Emergency
BPR	Business Process Re-engineering
CatSalut	Catalan Health Service
CPM	Contemporary Performance Measurement
CPR	Cardiopulmonary Resuscitation
EFQM	European Foundation Quality Management
ER	Emergency Room
ERP	Enterprise Resource Planning
ICS	Catalan Institute of Health
ISO	International Organizational for Standardization
IOM	Institute of Medicine
IT	Information Technology
JCI	Joint Commission International
LOSC	Health Organisation Act of Catalonia
MCS	Management Control System
NPM	New Public Management
PMS	Performance Measurement System
RQ	Research Question
SAP	Systems, Applications, Products
SISCAT	Integrated Public Health System of Catalonia
SOX	Sarbanes-Oxley Act
SPO	Structure-Process-Outcome
SWOT	Strengths-Weaknesses-Opportunities-Threats
TQM	Total Quality Management
U.K.	United Kingdom
U.S.	United States
WHO	World Health Organization
XHUP	Catalan Public Hospital Network

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CHAPTER 1: INTRODUCTION

1.1 Background and motivation for research

In the public sector, concerns about improving performance using well developed control measures facilitating decision-making (Kurunmäki and Miller, 2006; Conrad and Guven-Uslu, 2011) have resulted in many discussions and debates around 'value for money' and doing 'more with less' (Chang, 2006; Yang and Modell, 2013). These popular expressions denote an emphasis on achieving enhanced efficiency with limited economic resources. In the particular case of healthcare, further constraints related to aging populations, expensive technological developments, rising costs of delivering good quality and meeting growing public expectations (Adler et al., 2003; Abernethy et al., 2007; Aidemark and Funck, 2009) are driving the adoption of policies aimed at developing sustainable healthcare systems (Eldenburg and Krishnan, 2007; Cardinaels and Soderstrom, 2013).

Over the past three decades, the increased use of performance measurement tools in the public sector reflects attempts to improve efficiency by means of containing costs and increasing quality (Kelly, 2008; Lapsley, 2008; Boyne and Walker, 2010). These reforms, embracing greater control efforts are clearly linked to the New Public Management (NPM) ideology. In global contexts where NPM ideas have been adopted, there has been a change in focus away from the use of control systems based on traditional input-oriented processes to strategic performance measurement systems (PMSs) based on more balanced and comprehensive financial and non-financial indicators (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009). However, these 'contemporary' PMSs (Franco-Santos et al., 2012) are not without their weaknesses (Vaivio, 1999; Kloot and Martin, 2000; Verbeeten, 2008).

In the context of public hospitals, the literature has also pointed to the difficulty in designing and using management control systems (MCSs) which satisfy a broad range of stakeholders and achieve multiple objectives which sometimes conflict (Abernethy et al., 2007; Eldenburg and Krishnan, 2007). For instance, there is a general view that quality improvement and cost reduction are intertwined objectives because of the growing pressure to increase the quality of services and at the same

time contain healthcare costs (Cardinaels and Soderstrom, 2013). However, it is not always clear whether these two objectives (cost and quality) should be viewed as complementary, contradictory or incompatible with one another (Morey et al., 1992; Carey and Burgess Jr., 1999; Hvenegaard et al., 2011; Hussey et al., 2013). This quest to deliver better quality outcomes at lower total costs seems to be the 'ultimate' value challenge for management (Kaplan and Porter, 2011).

While in past decades healthcare performance measurement has stressed the importance of cost objectives, quality targets are becoming one of the top priorities on the agenda of national governments (Cardinaels and Soderstrom, 2013; Malmmose, 2015; Pflueger, 2015). For example, hospital accreditation programmes are a clear illustration of large-scale plans designed to guarantee a minimum set of care quality and patient safety standards (Shaw, 2006; El-Jardali et al., 2008; Greenfield and Braithwaite, 2008). The effects of quality pressures from external stakeholders remain an underexplored topic in the healthcare management accounting literature (Cardinaels and Soderstrom, 2013) despite the long tradition of healthcare organisations in measuring performance (Aidemark and Funck, 2009).

Hospital accreditation systems represent external instruments used to formalise and control organisational behaviour; however, they are considered contentious due to the mixed evidence on their quality improvement effectiveness (El-Jardali et al., 2008; Pomey et al., 2010). Recent literature reviews on healthcare accreditation (Greenfield and Braithwaite, 2008; Hinchcliff et al., 2012; Mumford et al., 2013; Jaafaripoyan, 2014; Ng et al., 2014; Brubakk et al., 2015; Nicklin, 2015) recognise their beneficial impact on quality outcomes, organisational management and professional practices; however, these studies also point to a loss of flexibility caused by the standardisation of organisational processes and numerous other negative effects related to work overload and an increased administrative burden. These mixed findings have led to a growing concern as to whether the outcome of hospital accreditation is merely organisational change, rather than quality improvement over time (Pomey et al., 2004; 2010). Thus, hospitals are confronted with a situation where a highly formalised and bureaucratic system needs to be managed to simultaneously achieve mandatory quality objectives and also increase flexibility and become more adaptable to the capabilities of its organisational members (Greenfield et al., 2013; Shaw et al., 2013).

1.2 Research objectives and research questions

MCSs represent attempts by organisations to design effective mechanisms to put into action intended strategies and accomplish desired objectives (Ferreira and Otley, 2009). MCSs are frequently seen as organisational processes and practices with two complementary purposes (Mundy, 2010). They are used to control the accomplishment of organisational strategic objectives and aid employees in seeking new opportunities and innovative ways of doing things (Simons, 1995; Ahrens and Chapman, 2004). Managers are required to achieve organisational strategies while offering employees autonomy and flexibility in decision-making and problem-solving activities (Speklé, 2001; Sprinkle, 2003; Tessier and Otley, 2012).

In order to evaluate the type of formalisation managers are confronted with, Adler and Borys (1996) suggest using the 'enabling & coercive' framework to better understand different attitudes to control practices. Coercive systems are characterised by formal 'command and control' detailed rules to enforce compliance and control employee behaviour, whereas enabling systems refer to rules promoting employees to develop their own skills, respond effectively to uncertainties and facilitate decision-making (Ahrens and Chapman, 2004). Adler and Borys (1996) maintain that four features of the system (repair, internal transparency, global transparency, and flexibility) and the processes of design and implementation are critical in defining the enabling/coercive nature of formalisation. While different lines of reasoning support the two types of formalisation (Ahrens and Chapman, 2004; Free, 2007; Cools et al., 2008), research has primarily focused on enabling features due to their favourable effects and positive attitudes. However, it still remains unclear which control approach is best suited or if the integration of both perspectives is a realistic possibility (Jordan and Messner, 2012).

The limited attention in the literature to the dynamics and interaction between enabling and coercive characteristics (Free, 2007; Cools et al., 2008; Jordan and Messner, 2012) presents an excellent opportunity to examine the applicability of this framework in the NPM setting and more specifically in the context of healthcare where multiple objectives need to be attained. It also provides an opportunity to investigate the applicability of the enabling/coercive framework to

external control systems which has been neglected in the literature. The aim of external control systems is to direct organisations (i.e., public hospitals) to focus on specific goals or objectives (i.e., quality and quantity measures). This research concentrates on a specific external control system, i.e., the accreditation system, where enabling and coercive features are present since healthcare accreditation programmes are typically externally mandated systems designed to monitor and measure the performance of organisations against a minimum set of quality standards (Touati and Pomey, 2009). In a comparative study of the French and Canadian hospital accreditation programmes, Touati and Pomey (2009) found that accreditation systems possess certain coercive and enabling features that promote change through the enforcement of quality standards (i.e., coercive) and also organisational learning and collaboration (i.e., enabling).

The context of this study is the acute care hospital accreditation of the Spanish region of Catalonia. The accreditation system was designed by the Catalan government as an external mandatory tool to guarantee that the network of hospitals were able to achieve a certain level of pre-set quality standards. The system imposes pressure on hospitals as without accreditation, they are unable to secure a contract with the main purchaser of public health services (the Catalan Health Service). The accreditation process combines various attributes related to compliance and regulation (i.e., quality assurance) as well as opportunities to enhance performance through the evaluation of processes and outcomes using organisational engagement and collaborative learning (i.e., continuous quality improvement). The purpose is to promote organisational changes through the evaluation of hospitals' performance based on cycles lasting approximately 3-4 years.

Therefore, this study aims to enhance and deepen our understanding of how external MCSs like healthcare accreditation are designed by governmental bodies and used by management staff of hospitals. Although prior studies have extensively examined the effects of using different costing systems (i.e., Lehtonen, 2007; Chapman et al., 2014; Chapman, 2015), there has been limited discussion in the management accounting literature about the impact of externally mandated MCSs on public healthcare organisations and how quality management mechanisms are designed and used when economic priorities guide the agenda of policy makers (Cardinaels and Soderstrom, 2013). Research examining the role of hospital

accreditation as a management control tool has been practically silent on this topic. This represents a relatively unexplored area in the management accounting literature with clear implications not only for healthcare management but also for other public services based on the fact that there is a growing tendency in contemporary managerial practices to pursue accreditation status. Addressing the following four research questions (RQs) is expected to enhance our understanding of the operation of hospital accreditation as an externally mandated control system and the implications of the system for attitudes of management and hospital staff:

RQ 1: What is the role of the accreditation system?

RQ 2: How enabling/coercive is the design of the accreditation system?

RQ 3: How enabling/coercive is the use of the accreditation system?

RQ 4: What are the attitudes of management towards the accreditation system and the triggers of those attitudes?

1.3 Methodology and research methods

In light of the aforementioned research questions and the topic being examined, this research follows a qualitative, interpretive and explanatory approach based on case studies of two public hospitals in one regional area of Spain, Catalonia. The selection of the case sites was based on similarities in terms of public ownership, willingness to participate and familiarity of the main researcher with the geographical context.

Data collection consists of fifty face-to-face semi-structured interviews, different forms of archival records and documentation, and non-participant observations over a two year period. Triangulation of data (Ahrens and Chapman, 2006b) is used to reinforce the credibility and reliability of the issues investigated (Patton, 2002; Yin, 2009). A rigorous approach to data collection and analysis has been adopted (Eisenhardt, 1989; Miles and Huberman, 1994; Yin, 2009).

1.4 Research contributions

Research using the enabling/coercive framework to examine MCSs is limited within public management and accounting literatures and almost non-existent in hospital settings apart from two quantitative studies in the Spanish context (Naranjo-Gil and Hartmann, 2006; Naranjo-Gil et al., 2016) and one based on secondary data by Touati and Pomey (2009). In addition, there is a dearth of accounting studies examining healthcare accreditation. Although recent research in the accounting field emphasises the critical role played by accreditation in educational settings (Cooper et al., 2014; Ahrens and Khalifa, 2015), the healthcare context remains highly unexplored. Thus, this thesis contributes to the control literature in several ways by examining the roles of an accreditation system, its enabling/coercive formalisation in relation to both design and use, and managerial attitudes towards externally mandated control systems. By carrying out two in-depth case studies, this thesis builds on Touati and Pomey's (2009) study which was based mainly on secondary research.

Firstly, this study contributes to the literature by detailing the dual role of accreditation showing how it has shifted from a regulatory mechanism to one emphasising continuous improvement. Findings illustrate how contemporary accreditation systems are becoming 'hybrid' models (Greenfield et al., 2016) by promoting minimum sets of standards and continuous quality improvement practices through the evaluation of structures, processes, and outcomes of care. Consistent with prior literature, findings also reveal how the accreditation system has manifested as a management instrument that integrates the pursuit of both quality and cost objectives (Grepperud, 2015).

Secondly, this research contributes to current knowledge on enabling/coercive formalisation by providing a more comprehensive picture of the two types of formalisations and describing the 'design' (ex-post examination) and 'use' phases. In addition to the system displaying hybrid features associated with quality assurance and continuous quality improvement, it also reflects a coexistence of enabling and coercive formalisations. While prior research has primarily focused on the enabling features of systems, this study supports the view that 'pure' types of enabling or coercive systems do not exist in reality (Ahrens and Chapman, 2004).

Additionally, the analysis of 'design' and 'use' features of the accreditation system provides a more complete picture of the system and helps to better understand its practical implications (Dowling and Leech, 2014).

Thirdly, this study suggests that some of the four 'features' of formalisation described by Adler and Borys (1996) (i.e., repair, internal transparency, global transparency, flexibility) have varying levels of importance when applied to an externally mandated control system. Findings indicate that in the public sector context where multiple stakeholders and objectives need to be managed, hospital accreditation systems based on regulated and rigid structures can still be used in an enabling manner even though many aspects of the system are consistent with a coercive formalisation. Findings reveal that some specific coercive aspects of the accreditation such as restricted repair and flexibility, which would normally be seen as coercive in the context of internal control systems (Ahrens and Chapman, 2004; Wouters and Wilderom, 2008), can be perceived in a more neutral way in the context of external control systems as there is an acceptance of their unavoidable presence in external control systems. For example, in contrast to the view of Adler and Borys (1996) who consider that systems designed by external experts will support a coercive logic resulting in negative attitudes, findings reveal that externally mandated control systems can also foster a more positive/neutral attitude towards control even when users of the system are not implicated in the design stages (a coercive feature).

Fourthly, and in conjunction with the previous point, this research contributes to extending our understanding of the importance of differentiating between the formalisation adopted in the design/use of the system and the perceptions of individuals towards the system (Tessier and Otley, 2012). It shows that features considered enabling according to the theoretical framework such as the use of voluntary indicators ('non-essentials' standards using the accreditation's terminology) can be perceived in a negative and undesirable way because they generate extra workload. In addition, features considered coercive such as restricted access to information were not perceived negatively by individuals because management adopted a team-working approach where information was provided to employees as needed. The reduced transparency associated with restricted access to information was not considered to have any undesirable impact on performance

of work. Therefore, this study offers empirical evidence to support the conjecture of Tessier and Otley (2012) that enabling and coercive features are different from positive and negative attitudes towards control.

Fifthly, the study contributes to the discussion about the character of modern NPM tools by showing how balanced and comprehensive PMSs (in this case the hospital accreditation system) promoted by NPM reforms (Hyndman and McGeough, 2008; Jansen, 2008) can take an extremely bureaucratic form with elements of an iron cage (Bifulco, 2011). For example, the system contains close to 700 formalised and compulsory standards and requires extensive use of rules and regulation that impose rigidity and reduce flexibility consistent with the negative effects of these systems highlighted in the literature (Greenfield and Braithwaite, 2008; Touati and Pomey, 2009). This study demonstrates that regulatory pressures can force compliance with imposed performance measures (Lachmann et al 2016) and can facilitate a transitioning from an input-oriented focus to use of an all-embracing PMS which permeates large complex organisations combining an array of financial and non-financial indicators (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009). As a result of this comprehensive regulatory system, hospital staff were compelled to engage across internal boundaries. This generated certain positive effects such as enhanced transparency, initiating a performance improvement dialogue. This increased engagement and dialogue resulted from greater information sharing and cooperation between the units comprising this public sector organisation, driven by the external regulatory system deadlines, in an effort to engage with and consider how to demonstrate improvement in the performance measure stipulated by the regulator. Linked to this is the final contribution of the study on ambivalent attitudes discussed in the next paragraph.

Lastly, this research contributes to recent literature examining the relationship between managerial attitudes and the nature of control systems by providing evidence of ambivalent orientations of individuals towards formalisation (Adler, 2012; Ashforth et al., 2014) based on their simultaneous positive and negative attitudes towards the accreditation system. In this particular study, the coexistence of positive and negative attitudes towards accreditation resulted from the mix of enabling and coercive features associated with the design and use of the system. While enabling features such as the self-assessment tool, freedom to select auditing

firm and assessment of non-compulsory standards were seen positively by individuals, coercive features related to restricted autonomy and limited opportunities to express opinions were perceived in a negative manner. Evidence of several triggers highlighted by Ashforth et al. (2014) such as (i) hybrid identities, contradictory goals, and role conflicts, (ii) organisational dualities, (iii) multifaceted objectives, and (v) temporal factors, explain why participants articulated simultaneous positive and negative attitudes towards the system. In addition, other triggers related to the healthcare context were identified such as the multiplicity of stakeholders and external pressures associated with demographic, economic and political factors.

1.5 Structure of the study

The structure of the seven chapters of this thesis is as follows. Chapter 2 provides an overview of contemporary PMSs with particular emphasis on the healthcare context. It presents how these systems integrate a broad variety of financial and non-financial indicators to satisfy multiple stakeholders and achieve varied organisational objectives. This is reflected for example in the healthcare challenge of simultaneously managing cost and quality. This chapter also introduces the literature on healthcare accreditation to understand how hospitals use accreditation to promote organisational changes and improve the quality of the health services provided within a health system characterised by a high degree of bureaucracy and formalisation.

Chapter 3 starts with a short introduction of MCSs and introduces the theoretical lens adopted in this study. It describes the original 'enabling & coercive' formalisation framework developed by Adler and Borys (1996) and underlines some of its key features and assumptions. It then elaborates on recent developments in the literature since the introduction of the framework to the management accounting field by Ahrens and Chapman (2004). The association between design and use of control systems and internal versus external controls systems are discussed in the context of this framework. Next, the chapter examines the applicability and usefulness of this framework in the context of the public sector. Then, literature on the distinction between enabling/coercive features and

individual attitudes (positive, negative, neutral) towards formalisation is reviewed. Following this, the chapter discusses the concept of ambivalence to illustrate circumstances where individuals have positive and negative attitudes at the same time towards formalisation.

Chapter 4 discusses the methodology and research method adopted in this research. It starts with a presentation of the research objectives and research questions and then discusses the rationale for embracing an interpretive and qualitative view. Next, this chapter presents the case study as the selected approach to investigate management control issues in two Spanish public hospitals based on a triangulation of three methods (semi-structured interviews, documentation, and observation). It also offers a comprehensive description of the steps followed to analyse, interpret and theorise the different types of data gathered. This chapter ends with a discussion of ethical considerations and actions taken to provide assurance on the rigour of the study and credibility of the findings.

Chapter 5 addresses the first research question on the 'role of accreditation'. It introduces the healthcare context of the Spanish region of Catalonia and describes the tensions confronted by hospitals in managing cost control and quality improvement. It also describes the key characteristics of the actual acute care hospital accreditation system and illustrates its transformation from quality assurance to quality improvement and its ambition to manage both cost control and quality enhancement. Findings from the two hospitals investigated (Hospital S and Hospital L) are presented in a combined way since few differences were observed between the two sites. Overall, this chapter uses the three different sources of available data (i.e., interviews, documentation and observation) to provide relevant information related to the context of the Catalan accreditation system which is useful in addressing the remaining three research questions in the next chapter.

Findings in Chapter 6 are divided into three sections and seek to answer research questions 2, 3 and 4. This chapter examines the 'design' (research question 2) and 'use' (research question 3) features of the accreditation system based on the enabling & coercive formalisation framework (Adler and Borys, 1996). It also presents findings on the different attitudes of management towards accreditation (research question 4). Similar to the previous chapter, findings are based on the

three sources of data used in this study and results from both hospitals are presented jointly as there were no noteworthy differences in findings between the two hospitals.

Chapter 7 discusses the findings presented in Chapters 5 and 6 and is structured into three sections. The first section addresses the first research question and discusses findings presented in Chapter 5. It argues that the current role of hospital accreditation follows a 'hybrid' model (Greenfield et al., 2016) that encompasses both quality assurance and quality improvement objectives. It also discusses the complexity of measuring efficiency in the context of healthcare. The second section discusses findings presented in Chapter 6 to address the second and third research questions. This section describes and interprets the four features of the framework (i.e., repair, global transparency, internal transparency, and flexibility) in the context of an external control system. Finally, the third section addresses question four and discusses the importance of differentiating between management intentions and employees' perceptions of controls. This section elaborates on the concept of ambivalence to illustrate simultaneous positive and negative attitudes towards accreditation and describes a number of triggers which have the potential to stimulate ambivalent orientations.

Finally, Chapter 8 summarises the key findings of this research and discusses the main contributions of the thesis. It also discusses important implications of the findings for healthcare management and the main strengths/limitations of the study before offering a number of suggestions for future research. Lastly, an overall conclusion of the chapter summarising the key ideas of this thesis is provided.

CHAPTER 2: PERFORMANCE MEASUREMENT AND MANAGEMENT IN HEALTHCARE

2.1 Introduction

This chapter presents the literature related to performance measurement & management in the healthcare context. It starts with an overview of the literature on performance measurement & management in general to illustrate how contemporary PMSs integrate a broad range of indicators to provide a comprehensive picture of organisations' objectives and stakeholders. Then, the chapter introduces recent developments in the healthcare literature.

2.2 Contemporary performance measurement & management systems

In a broad sense, management control is concerned with the accomplishment of goals and objectives (Anthony, 1965; Otley and Berry, 1980; Merchant and Van der Stede, 2012). MCSs symbolise attempts made by organisations to design effective processes to implement intended strategies and accomplish desired goals and objectives (Langfield-Smith, 2007; Merchant and Otley, 2007; Ferreira and Otley, 2009). MCSs are regarded as fundamental to the strategy process and useful tools for strategy implementation (Simons, 1995).

A key component and subset of MCSs is 'performance management' & 'performance measurement' systems. Although both terms describe similar processes (Lebas, 1995; Otley, 1999; Bourne et al., 2003; Smith, 2005) and are often used interchangeably in the literature (Franco-Santos et al., 2007), performance management denotes a more general approach including those instruments used by managers to improve organisational performance (Ferreira and Otley, 2009) whereas performance measurement is considered as a subcategory of performance management focused more closely on indicators, metrics or measures to evaluate performance issues (Otley, 1999; Neely, 2005; Goh, 2012). Nonetheless, both practices embody a managerial activity concerned with the accomplishment of specific outcomes or results where managers influence people

behaviours to put into practice the organisational strategy and goals (Hall, 2008; Broadbent and Laughlin, 2009; Adler, 2011).

The fast changing nature of today's environment has transformed the use of accounting and management techniques, as the focus of performance measurement has shifted from operational and functional areas to a strategic level (Ittner and Larcker, 1998; Srimai et al., 2011; Nixon and Burns, 2012). Recent research points to more holistic and comprehensive MCSs (Malmi and Brown, 2008; Grabner and Moers, 2013) and a move from performance measurement to performance management practices (Neely et al., 1995; Smith, 2007; Berry et al., 2009; Srimai et al., 2011; Melnyk et al., 2014). While in the 1980s the emphasis was placed on 'what gets measured gets done', since mid-1990s attention has focused on 'how to manage what it is measured' (Kaplan and Norton, 2001, Srimai et al., 2011). This transition emphasises the idea that performance management is more valuable than performance measurement because it integrates organisational goals with means of action (i.e., plans, strategies) and combines a broad variety of activities (i.e., planning, measuring, analysing, evaluating and rewarding performance) to assist managers in the pursuit of higher organisational performance (Chenhall, 2005; Ferreira and Otley, 2009; Adler, 2011).

Research also suggests that organisations should adopt a more balanced and multidimensional managerial style to integrate the use of non-financial, qualitative and future-oriented measures alongside traditional indicators based on financial and quantitative metrics (Kaplan and Norton, 1992; Vaivio, 1999; Simons, 2000; Aidemark, 2001; Chenhall, 2003; Hall, 2008; Ferreira and Otley, 2009; Franco-Santos et al., 2012). These systems are generally referred to as 'contemporary performance measurement' (CPM) systems[1] (Franco-Santos et al., 2012) and they embrace a variety of "financial and non-financial measures used to operationalise strategic objectives"[2] (p.80). Common features describing these systems include the

[1] Franco-Santos et al. (2012, p. 80) noted that 'contemporary performance measurement' has been frequently used as a synonym for the following terms: *'integrated performance measurement'* (Bititci et al., 1997), *'comprehensive performance measurement'* (Hall, 2008), *'strategic performance measurement'* (Ittner et al, 2003; Burney and Widener, 2007; Micheli and Manzoni, 2010; Bisbe and Malagueño, 2012) or *'business performance measurement'* (McAdam and Bailie, 2002).

[2] This definition is founded on three assumptions: (i) CPM system function is to evaluate performance for either informational or motivational reasons; (ii) CPM systems consist of a supporting mechanism, ranging from simple structures (i.e., Microsoft Excel) to more complicated and sophisticated methods; and (iii) CPM systems contain detailed processes of information provision, measure design and data capture.

combination of long-term and operational objectives, the use of numerous measures to integrate several performance dimensions[3] and the capacity to provide causal associations between strategic objectives and performance measures (Ittner et al., 2003; Hall, 2008; Berry et al., 2009; Micheli and Manzoni, 2010; Bisbe and Malagueño, 2012). Typical examples of CPM systems also include the Balanced Scorecard (Kaplan and Norton, 1992), the Levers of Control framework (Simons, 1995) and some modern performance management frameworks (i.e., Broadbent and Laughlin, 2009; Ferreira and Otley, 2009)[4].

Even if the integration of financial/non-financial information, short-term/long-term objectives and hard/soft measures have assisted managers in their daily management activities to represent the views of different stakeholders (Ittner et al., 2003; Chenhall and Langfield-Smith, 2007; Holloway, 2009; Srimai et al., 2011), findings to date demonstrate mixed results in terms of positive and negative performance effectiveness. For example, Franco-Santos et al. (2012) indicate that supporters of CPM systems describe what these systems are supposed to do (i.e., assist organisations to put into practice strategies that will lead to enhanced performance) but fail to explain how to do it. In addition, they point out that there is an increasing level of agreement in the literature that CPM systems do not automatically increase performance as there are various other factors including the design, development, use and contextual factors of such systems which are responsible for driving performance improvements. Wider organisational aspects related to management style, culture and rewards, and external factors dealing with regulatory, political and environmental influences still remain a challenging task for management purposes (Henri, 2006a; Bhimani and Langfield-Smith, 2007; Malmi and Brown, 2008; Berry et al., 2009; Ferreira and Otley, 2009; Franco-Santos et al., 2012).

[3] For example, Ittner et al. (2003) uses the term 'measurement diversity' to denote this combination of financial and nonfinancial measures that represent the critical strategic performance elements that are not completely integrated in short term focus and economic nature of accounting indicators.

[4] The development of some quality management methods during the 1980s such as Total Quality Management (TQM), Business Process Re-engineering (BPR) and Benchmarking is seen as the starting point of the development of these new performance measurement innovations (Spicer, 1992; Lind, 2001; Srimai et al., 2011).

2.3 Performance measurement & management in the healthcare context

Performance measurement is a critical instrument for the sustainability of modern healthcare systems. As pointed out by several researchers (i.e., Adler et al., 2003; Østergren, 2006; Abernethy et al., 2007; Eldenburg and Krishnan, 2007; Aidemark and Funck, 2009; Ellwood, 2009; Dyball et al., 2011; Cardinaels and Soderstrom, 2013; Chang, 2015), healthcare is a complex and challenging sector characterised by a number of unique features. First, there continues to be a significant intervention from central governments although market-oriented mechanisms are being extensively adopted. Second, there is a wide range of stakeholders and multiplicity of objectives. For instance, healthcare organisations need to find a balance between short-term priorities (i.e., urgent surgeries and treatments, decrease on waiting lists) and long-term objectives (i.e., prevention of diseases, promoting healthy life styles) to manage efficiency concerns. Third, there is also an increasing demand for specific services which are very difficult to manage due to a number of factors related to demographic developments (growing and ageing population), economic and financial constraints (allocation of limited resources in a context of high technological costs), social requirements (higher expectations and knowledge of patients due to readily available information in the internet) and growing external scrutiny and accountability pressures. Finally, better integration of data information is needed. Although healthcare organisations have a long tradition in collecting data, information related to medical and non-medical activities is frequently fragmented.

Over the past three decades, a whole array of ideas, initiatives and managerial styles developed in private organisations have been introduced in the public sector (Lapsley, 2008; Arnaboldi et al., 2015; Hyndman and Liguori, 2016). This influential change, frequently labelled under the term 'New Public Management' (NPM) (Hood, 1991) has stimulated the proliferation and popularity of performance measurement instruments attempting to improve the effectiveness, efficiency and accountability amongst public services (Hood, 1995; Lapsley, 1999; Modell, 2004; Jansen, 2008; Cuganesan and Lacey, 2011). The NPM philosophy[5] has primarily

[5] The key aspects of NPM were summarised by Hood (1995) in seven doctrines of change: (i) adoption of an organisation structure where divisions are categorised according to products, (ii) contract-based relationships between the organisation as a whole and its divisions, (iii) emphasis on private sector methods of management, (iv) budgeting's stress on resource savings and efficiency, (v) more hands-on top management, (vi)

focused on the three 'Ms' of market, measurement and management (Hughes, 2003) and attempted to reform administrative activities by encouraging a more business-like management under the slogan of 'cutting costs and doing more for less' (Hood, 1991, p.15). NPM ideas have been pervasive in discussions and debates surrounding public administration, and political debates continue to be strongly framed using NPM (Hyndman and Liguori, 2016).

While initial developments focused on accounting and quantifiable indicators as a control mechanism (Modell, 2004), successive NPM waves have placed higher emphasis on non-financial measures and additional examination of measurement dimensions at the organisational level (Siverbo and Johansson, 2006). Many public sector organisations have endeavoured to develop targets that cover all aspects of an organisation's performance (Hyndman and McGeough, 2008). Performance information has also become critical to compare deviations between pre-defined targets and actual performance, and underline the importance of outputs and results (Jansen, 2008). Reforms involving a greater focus on performance measurement do not occur in isolation, but are influenced by global discourses of modernisation and by the institutional pressures existing in a certain field at a point in time (Hyndman et al. 2014).

As part of the NPM transformation, the healthcare environment has also undergone significant changes and reforms (Aidemark and Lindkvist, 2004; Nyland and Pettersen, 2004; Pettersen, 2004; Lehtonen, 2007; Chang, 2009; Ellwood, 2009; Dyball et al., 2011) based on the introduction of new accounting methods and organisational incentives to reduce inefficiencies, improve control, facilitate decision-making and promote performance management activities (Kurunmäki and Miller, 2006; Conrad and Guven-Uslu, 2011). The adoption of performance measurement frameworks (PMFS) by regulators in public health systems has progressively increased (Mariani and Tieghi, 2016). Governments through this modernisation process have been progressively placing higher demands for improving efficiency and delivering 'value for money' (Chang, 2006) by means of containing costs and increasing quality (Kelly, 2008; Boyne and Walker, 2010).

performance management based on more explicit measures that relate to targets defined at an earlier stage, and (vii) emphasis on outputs and results.

These changes have also supported a growing adoption of standards in medical practice (Triantafillou, 2014) and encouraged healthcare professionals (i.e., clinicians and nurses) to learn and use management accounting principles and methods in their daily activities (Kurunmäki and Miller, 2006)[6].

In addition, healthcare NPM reforms have caused a noticeable change in focus from a reliance on traditional input-oriented processes to CPM systems or strategic PMSs based on more balanced and comprehensive approaches (Ballantine et al., 1998; Kloot and Martin, 2000; Aidemark, 2001; Pettersen, 2004; Lehtonen, 2007). Although these innovative measurement tools have become critical in evaluating quality improvement or overall organisational performance (Llewellyn, 1998; Adolfsson and Wikström, 2007; Aidemark and Funck, 2009), findings to date reveal a mix of successful attempts (Kurunmäki et al., 2003; Aidemark and Lindkvist, 2004; Pettersen, 2004; Kober et al. 2007; Lehtonen, 2007; Cookson et al., 2010) and failing initiatives (Kurunmäki et al., 2003; Nyland and Pettersen, 2004; Robbins, 2007; Conrad and Guven-Uslu, 2011; Kurunmäki and Miller, 2011) in the implementation of NPM practices[7].

Research also indicates that there are still a number of obstacles hampering the accomplishment of goals and enhanced performance causing a number of unintended and dysfunctional consequences (Llewellyn and Northcott, 2005; Bevan and Hood, 2006; Ellwood, 2009; Kelman and Friedman, 2009; Lapsley, 2009; Mannion and Braithwaite, 2012). Differences in terms of expectations and interests between administrative staff, medical-professional groups and political parties have frequently been seen as factors hindering the successful application of accounting tools to measure and manage performance (Aidemark and Funck, 2009). A number of psychological studies also emphasise that the appropriate assessment of a large number of measures is problematic because human beings have limited cognitive capabilities. For example, George (1956) suggests that individuals cannot manage more than seven measurements simultaneously. Similarly, research related to comprehensive and all-embracing managerial tools like the Balanced Scorecard

[6] This process is frequently referred to as 'hybridisation' (Kurunmäki, 2004) and is viewed as an attempt to make public service providers accountable for their actions. It has also allowed accounting tools to permeate deeper in the healthcare domain.

[7] While NPM experiences in the Nordic countries (i.e., Sweden, Norway and Finland) show certain positive acceptance, evidence in other countries such as the U.K. is not exempt from difficulties and challenges.

shows that when individuals need to assess many initiatives at the same time, there is a high probability of failure because humans are only capable of focusing on a rather limited number of performance measures (Malina and Selto, 2001; Zeng and Luo, 2013).

2.4 Complexity of measuring performance in healthcare

While healthcare research during the 1990s stressed the importance of costing systems (i.e. Activity Based Costing) to facilitate relevant information for decision-making (Llewellyn, 1993; King et al., 1994; Jones, 1999), recent studies in the literature are placing greater attention on examining other attributes related to efficiency and quality objectives (Cardinaels and Soderstrom, 2013; Malmmose, 2015; Pflueger, 2015). The increasing demand for more accurate healthcare data to monitor and calculate better ways to improve cost-effectiveness and quality standards has also led to the development of more comprehensive and integrated information systems (Vikkelsø, 2007). However, in some contexts where new performance measures were introduced with the intention of improving hospital management they were not adequately linked into hospitals' management systems (Mesabbah and Arisha, 2016).

A common concern in the literature is that although more integrated and multifaceted approaches tend to assist and facilitate decision-making activities, financial and quantitative assessments still disregard the quality facet of services since qualitative performance measurement is more difficult to evaluate (Vaivio, 1999; Kloot and Martin, 2000; Pollitt, 2006). This complexity arising from the measurement of qualitative performance (for example, innovation success or failure) has tended to increase the focus of many organisations on measuring simpler and more controllable quantitative financial indicators (Jenkins et al., 1998; Newberry and Pallot, 2004). The unquantifiable nature of numerous services provided and the unclear link between long term effects and outcomes (Brignall and Modell, 2000; de Bruijn, 2002) also create certain difficulties since improvement outcomes are sometimes only visible after several statistical observations (Eddy, 1998). Correspondingly, Verbeeten (2008) argues that the trade-off between quantitative information represented by short-term performance targets (i.e.,

quantity produced and level of efficiency achieved) and qualitative information characterised by long-term or strategic performance objectives (i.e., quality and innovation) still remains a key challenge for public organisations.

In the healthcare context, performance measurement is even more intricate because many processes and services combine measurable and quantifiable indicators with difficult to measure quality aspects (Morey et al., 1992; Carey and Burgess, Jr., 1999; Hvenegaard et al., 2011; Hussey et al., 2013). Although the concept of quality is understood differently depending on the field or discipline[8], quality in healthcare is seen as an 'elusive characteristic' (Carey and Burgess, Jr., 1999) and 'undivided phenomenon' (Meirovich et al., 2007) integrated by many elements of an intangible nature. It is also a concept where definitions and interpretations have evolved over time (McGlynn, 1997; Jun et al., 1998; Shaw, 2004; Arah et al., 2006; Legido-Quigley et al., 2008)[9]. While earlier definitions of quality were primarily focused on the view of healthcare professionals and researchers, contemporary definitions also take into account other stakeholders such as patients and society (Brook et al., 1996; Shaw and Kalo, 2002). Interpretations of the concept of quality include 'measurable indicators' such as mortality, intermediate outcome indicators (i.e., medical errors, infections and complications) or process indicators (i.e., unexpected readmissions and average length of stay) (de Pouvourville and Minvielle, 2002) and 'labels' including dimensions such as safety, equity, accessibility, appropriateness, acceptability, efficacy, effectiveness, efficiency or patient centeredness (IOM, 1990; Fletcher, 2000; Woodward, 2000).

2.4.1 The pursuit of cost reduction and quality improvement in healthcare

Although many accounting studies examining contemporary policies and practices of healthcare systems consider that efficiency matters are primarily associated with

[8] Reeves and Bednar (1994) emphasise that in general quality symbolise four different types of concepts: excellence, value, conformance to specifications, and meeting/exceeding expectations.

[9] See Legido-Quigley et al. (2008) for an overview of definitions of quality in healthcare. The definitions provided by Donabedian (1980), the Institute of Medicine (IOM, 1990) and the World Health Organization (WHO, 2000) are considered the most influential ones to date. While Donabedian (1980) defines quality of care as the kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts, the Institute of Medicine (1990) refers to quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Lastly, the WHO (2000) definition describes quality of care as the level of attainment of health systems' intrinsic goals for health improvement and responsiveness to legitimate expectations of the population.

'cost' concerns (Lehtonen, 2007; Chapman et al., 2014; Chapman, 2015), recent literature strengthens the close relationship between 'quality' and efficiency improvements (Malmmose, 2015; Pflueger, 2015; Swinglehurst et al., 2015). In order to achieve better quality services at lower costs (Kaplan and Porter, 2011; Cardinaels and Soderstrom, 2013; Häkkinen et al., 2014), discussions in the healthcare literature have focused on the measurement of two concepts which show certain similarities: 'efficiency'[10] (i.e., Hussey et al., 2009, 2013; Jha et al., 2009; Mennicken et al., 2011; Papanicolas and Smith, 2013) and 'value'[11] (i.e., Nolan and Bisognano, 2006; Makadon et al. 2010; Kaplan and Porter, 2011; Porter and Lee, 2013). Studies published in healthcare management and medical journals have long recognised 'efficiency' as one of the numerous dimensions of quality that examines the relationship between inputs, outputs and outcomes (Palmer and Torgerson, 1999). Although both labels have similar meanings, the definition and measurement of healthcare 'value' is considered more challenging (Malmmose, 2015) since value incorporates 'efficiency' (Porter, 2010).

Previous studies point to mixed findings on the relationship between cost and quality, particularly in terms of ambiguity as to whether the two objectives are complementary, contradictory or incompatible with one another (Fleming, 1991; Morey et al., 1992; Carey and Burgess Jr., 1999; Leatherman et al., 2003; Jha et al., 2009; Chen et al., 2010; Schreyögg and Stargardt, 2010; Hvenegaard et al., 2011; Hussey et al., 2013)[12]. The extensive literature review by Hussey et al. (2013) on the relationship between cost and quality shows that this relationship can take many

[10] *'Efficiency'* in health care is defined or measured as "the relationship between a specific product of the health care system (also called an output) and the resources used to create that product (also called inputs). By this definition, a provider in the health care system (e.g. hospital, physician) would be efficient if it was able to maximize output for a given set of inputs or to minimize inputs used to produce a given output" (Hussey et al. 2009, p. 787). According to Papanicolas and Smith (2013) economists frequently differentiate between 'allocative' and 'technical' efficiency. Whereas allocative efficiency refers to the limited resources used towards producing the right mix of healthcare outputs, technical efficiency denotes the way a system minimises costs in producing its selected outputs, irrespective of the outputs value.

[11] *'Value'* in health care is defined or measured as "outcomes relative to costs" (Porter, 2010, p. 2477), "improved outcomes at a lower cost" (Kaplan and Porter 2011, p. 49), "patient outcomes achieved per dollar expended" (Kaplan and Porter, 2011, p. 50), "the health outcomes achieved that matter to patients relative to the cost of achieving those outcomes" (Porter and Lee 2013, p. 51) and "quality divided by cost" (Burgess, Jr., 2012, p. 8).

[12] See for instance, Fleming's (1991, p.29) view on cost/quality objectives: "At the heart of the controversy is the mysterious relationship between quality and cost. A positive relationship would indicate that quality and cost move in the same direction, an increase in quality being associated with an increase in cost. A negative relationship would imply that quality improvements are associated with cost savings. Alternatively, the quality and cost relationship may be intricate, being positive in some cases and negative in others".

different forms (i.e., higher cost leads to higher quality, lower cost leads to lower quality, higher quality leads to lower cost) and produce varied effects on performance (i.e., positive, negative, imprecise or indeterminate, mixed, no difference) depending on the level of analysis, the measurement of quality, the measurement of cost and the statistical method used. For example, quality can be analysed using measures related to different areas including structures, processes, outputs, outcomes and patient experiences. Hussey et al. (2013) also indicate that prior studies provide inconsistent and unclear findings whether reductions in costs will negatively affect quality, or whether quality improvement will reduce healthcare expenditures. Interestingly, they recognise the possibility that the relationship between cost and quality may be nonlinear (Fleming, 1991; Hicks et al., 2004).

Additionally, there is a view that poor-quality could be costly (Moullin, 2002) and the management of certain activities related to reductions of length of stay and invoice errors could enhance quality while decreasing costs (Does et al., 2010). A number of researchers (i.e., Chen et al., 2010; Hvenegaard et al., 2011) have used the term 'trade-off' to describe different choices associated with the maximisation or minimisation of cost and quality objectives. For example, Hvenegaard et al. (2011) point to two different types of cost/quality associations. On the one hand, there is a potential negative relationship between poor quality and high costs as higher incidences of adverse events are associated with higher costs (i.e., patients suffering adverse events related to medical errors and infections tend to consume additional hospital resources due to longer hospitalisation periods). On the other hand, the linkage between investment and degree of quality achieved suggests that costly investments will produce higher quality levels (i.e., larger number of nurses per patient is usually associated with higher quality levels in terms of prevention of adverse effects). In addition, Chen et al. (2010) indicates that cost/quality trade-offs have been used in the literature to demonstrate that higher expenditure levels do not automatically translate into better healthcare services.

The literature has also revealed certain concerns about the effectiveness of using short term cost control strategies to enhance quality (Goddard et al., 2000; Aidemark, 2001; Yuen and Ng, 2012). For instance, Yuen and Ng (2012) indicates that cost management could be regarded as a preventive strategy to control costs in

the long run and suggest that greater focus on cost control (a short-term strategy) over quality improvement (a long-term strategy) (Naranjo-Gil and Hartmann, 2007) could lead to detrimental effects in the management of both cost and quality objectives. Similarly, Aidemark (2001) reveals that overemphasis on financial controls could negate quality improvements.

2.5 Healthcare accreditation systems

In order to manage some of the previous challenges, governments and regulatory bodies use comprehensive quality plans to evaluate the quality of care and overall performance delivered by healthcare organisations (Øvretveit and Klazinga, 2012). Accreditation policies, benchmarking systems, clinical practice guidelines, national quality strategies or financial rewards/penalties schemes are elements of large-scale quality systems in healthcare (Øvretveit and Gustafson, 2002; Groene, 2011).

Two of the most common approaches to address quality evaluations are 'quality assurance' and 'quality improvement' (Adler et al., 2003; Øvretveit, 2003; Pomey et al., 2004). On the one hand, quality assurance refers to the mechanisms applied to certify compliance with a minimum set of pre-established quality standards[13]. On the other hand, quality improvement denotes a continuous process of enhancing quality levels by identifying and implementing varied strategies, measuring performance, and evaluating results and outcomes (Woodward, 2000; Donabedian, 2003). Quality improvement entails evolving processes that influence personnel, organisational and cultural structures as it involves the ongoing development of practices that promote transparency and corporate responsibility among managerial and medical staff (Shaw, 2004). It also helps to reduce the percentage of defects (i.e., prevention of avoidable complications due to unanticipated infections), failure costs (i.e., prevention of errors that can be very costly in financial terms) and variations in processes due to the implementation of consistent, robust, and reliable procedures over time (Meirovich et al., 2007). This dual role relates, in particular,

[13] Definitions of 'standards' differ in terms of meaning and scope (Timmermans and Epstein, 2010). In a broad sense, standards are seen as "norms selected as a model by which people, objects or actions (including government itself) can be judged and compared, and which provide a common language to evaluators, the evaluated and their audiences" (Ponte et al., 2011, p.1). They are key elements of TQM practices, aiming at developing better structures and processes in healthcare provision, particularly in hospitals (Grol, 2000).

to hospital accreditation because it has frequently been used as a quality assessment method that involves both assurance and improvement (Arce, 1998; Woodward, 2000; Pomey et al., 2004, 2010; Touati and Pomey, 2009). Its combination of assessment against predefined standards and continuous improvement focused on encouraging cultural changes encapsulates some of the key purposes of accreditation as, for example, the pursuit of measurable and sustainable improvement over time (Scrivens, 1997; Arah et al., 2006).

Adler et al. (2003) argue that a noticeable aspect of quality management systems in hospitals is the shift from 'assurance' of minimum acceptable levels of quality to 'continuous improvement' in order to guarantee that over the years average quality levels increase and discrepancies in results and outcomes are reduced. They note that "the focus thus broadens to include a whole host of processes contributing to the quality and cost of care", involving a change "to continuously upgrading everyone's knowledge and skills" by way of promoting "pro-active improvement initiatives" (Adler et al., 2003, p. 17). Similarly, Pomey et al. (2004) support the viewpoint that current accreditation processes are evolving from quality assurance to quality improvement. Therefore, this evolution in quality management and accreditation systems denotes as a result a move from external reviews and yes/no standard checklists to a new measurement approach centred on internal reviews and self-assessments, active role and participation of personnel, a focus on quantifiable improvement over time and including those activities linked to patient satisfaction, patient safety and prevention of medical errors.

Accreditation is a formal, rigorous and well-established assessment process used to evaluate and promote effective and efficient ways of delivering specific standards (Pomey et al., 2010). Performance measures adopted in public sector organisations are primarily affected by regulatory pressures (Lachmann et al., 2016). In the healthcare context, accreditation is a widespread tool used by governments to regulate and guarantee a selection of quality specifications linked to patient care and safety (Shaw, 2006; El-Jardali et al., 2008; Greenfield and Braithwaite, 2008). In order to attain public recognition, accreditation programmes follow a sequence of stages comprising self-assessment, on-site survey, peer review interviews, an official report (with or without recommendation), an award or refusal, and follow-up evaluations to guarantee that organisations maintain certified quality levels

(Shaw, 2004; Touati and Pomey, 2009; Braithwaite et al., 2010; Pomey et al., 2010). Participation is voluntary or obligatory depending on the particular characteristics of regional or national legislations (Shaw, 2003a). However, current regulation and legislation trends in the healthcare industry indicate a growing expansion of mandatory accreditation through external governmental agencies (Touati and Pomey, 2009).

Recent experiences on the development of healthcare accreditation programmes resonate with a recent study by Greenfield et al. (2016) who used the term 'hybrid' model of accreditation to describe a system that embraces both 'compliance' and 'quality improvement'. Greenfield et al. (2016) examined three sectors of the Australian health system and found that their accreditation programmes encouraged the evaluation of structures, processes and outcomes[14] of healthcare activities by using compulsory standards and quality improvement methods. The hybrid model is seen as an example of a quality management system that brings together the benefits of the two philosophies to improve quality and safety standards. Similarly, recent findings by Ahrens and Khalifa (2015) in the education sector reinforce this view on the hybrid model of accreditation by pointing out that accreditation is not only an administrative 'box ticking' exercise to comply with government requirements, but also an improvement management instrument extremely useful as an internal mechanism to promote feedback and higher cooperation between departments.

In addition, the degree of appropriate levels of rigidity/flexibility within accreditation programmes has recently received further attention in the accreditation literature (Greenfield et al., 2013; Ahrens and Khalifa, 2015). Healthcare organisations are confronted with a difficult situation because they need to simultaneously manage the attainment of compulsory quality standards as well as provide some degree of flexibility to adjust organisational structures and

[14] The 'Structure-Process-Outcome' (SPO) model was introduced by Avedis Donabedian (1966) in the healthcare domain and is frequently used as a key quality performance measurement instrument in contemporary healthcare organisations. Although there are many ways of measuring quality, practically all measures fall into one of the three following categories: structure, process, or outcome. The underlying rationale of this model is that healthcare activities follow a flow in which appropriate organisational and professional structures (i.e., resources and facilities) help to develop better processes (i.e., clinical/non-clinical activities) based on evidence-based clinical guidance and best practice, which in turn lead to enhanced patient outcomes (i.e., patient satisfaction, infection incidences) (Mant, 2001; Mainz, 2003).

medical/non-medical practices to satisfy the requirements of highly formalised and bureaucratic systems like accreditation (Pomey et al., 2005; Greenfield and Braithwaite, 2008; Shaw et al., 2013). Greenfield et al. (2013) referred to Touati and Pomey's (2009) investigation to exemplify how different accreditation programmes could be rigid and flexible at the same time. Touati and Pomey (2009) noticed that the obligatory programme in France and the voluntary programme in Canada included characteristics that appeared to be converging in a more 'balanced' approach as the French system tried to integrate more voluntary features and the Canadian system more compulsory requirements. This interpretation is also shared by Shaw et al. (2013) who indicated that a growing number of countries in the world were trying to "strike a balance" (p.226) between a top-down examination model imposed by legal regulation and a more 'collegial' approach based on promoting educational sharing, professional development and continuous improvement.

In a broad sense, the literature on the role and consequences of healthcare accreditation has predominantly focused on providing evidence of changes in professional, managerial and organisational practices, and impact on healthcare outcomes, and patient satisfaction. Despite the fact that a large number of investigations recognise the positive impact of accreditation on quality and organisational processes, healthcare accreditation literature reviews to date reveal a complex picture with a mix of unclear and conflicting findings with regard to quantifiable performance improvements delivered by hospitals (Cerqueira, 2006; Shaw, 2006; Greenfield and Braithwaite, 2008; Nicklin and Dickson, 2009; Alkhenizan and Shaw, 2011, 2012; Flodgren et al., 2011; Hinchcliff et al., 2012; Jaafaripooyan, 2014; Ng et al., 2014; Brubakk et al., 2015; Nicklin, 2015). Researchers such as Greenfield and Braithwaite (2008) and Hinchcliff et al. (2012) argue that previous empirical studies on the potential advantages of accreditation can be classified in three broad categories according to the uniformity and reliability of findings: consistent, inconsistent, and inadequate. For example, the systematic review conducted by Greenfield and Braithwaite (2008) reveals that only the promotion of organisational change and professional development have consistent positive findings. This view of accreditation as a 'driver for change' tool (Cooper et al., 2014) is seen in the literature as an encouraging way to transform the functioning of hospitals by promoting changes in processes related to clinical and

non-clinical activities (Duckett, 1983; Scrivens et al., 1995; Pomey et al., 2004, 2010; Juul et al., 2005; Greenfield et al., 2012). Other potential advantages of accreditation cannot be generalised because findings are inconsistent (professions' attitudes to accreditation, organisational impact, financial impact, quality measures, and validity of program assessment) or inadequate (consumer views or patient satisfaction, public discourse, and surveyor-reliability issues) (Greenfield and Braithwaite, 2008).

Even though previous studies recognise that accreditation systems can be portrayed as quality improvement processes that stimulate professional development, encourage organisational and clinical practice changes, provide better information for decision-making and promote accountability and legitimacy, there are certainly various shortcomings of having a certificate of accreditation. Several academics and scholars have questioned the effectiveness and usefulness of accreditation programmes arguing that a large number of healthcare professionals perceive hospital accreditation as a bureaucratic and laborious mechanism unable to enhance quality services (Pomey et al., 2004; Greenfield and Braithwaite, 2008; Touati and Pomey, 2009; Alkhenizan and Shaw, 2012; Jaafaripooyan et al., 2014; Ng et al., 2014). These studies emphasise particular concerns related to work overload, increase in administrative tasks, resistance to change, opportunistic behaviour and maintenance costs which can undermine the implementation of accreditation programmes. For instance, Greenfield and Braithwaite (2008) indicate that there is a negative perception of healthcare professionals towards the accreditation system because it generates extra costs and red tape. Similarly, in the context of bureaucratic organisations, accreditation could be compared to an 'iron cage' mechanism that promotes "oppression and constriction" and limits the autonomy and freedom of individuals (Bifulco, 2011, p. 284). The NPM critique on the topic of bureaucracy points to an increase of procedural and task overload, higher de-professionalisation of individuals due to standardisation of processes and further commodification of services (Adcroft and Willis, 2005; Bifulco, 2011).

Finally, a number of studies indicate that healthcare accreditation can operate as an effective mechanism to reduce unnecessary costs and increase efficiency (Rooney and Van Ostenberg, 1999; Shaw, 2004; Grepperud, 2015), although prior research on the financial impact of accreditation on organisational performance (based on

cost-benefit analysis and quality improvement practices) reveals contradictory and conflicting findings (Greenfield and Braithwaite, 2008). Based on an analysis of numerous studies related to the advantages of healthcare accreditation programmes, Grepperud (2015) reveals that cost reductions and output quality improvement are the two 'endpoints benefits' valuable to society. While cost reductions can be achieved by improved procedures and standards' compliance, better use of resources, and lower failure rates, output quality improvements result from the added value of services delivered and integrate all the quality characteristics valued by patients and customers such as clinical quality and facilities. However, in the particular case of healthcare accreditation, the diversity of expectations and interests of different stakeholders including designers, users and observers can also instigate numerous difficulties while trying to improving quality and containing costs (Shaw, 2003b). The multiplicity of performance measurement approaches (i.e., process vs. outcome) and methods of evaluating quality (i.e., perceptions vs. objective measures) contained in the healthcare accreditation literature create certain challenges in capturing quality improvements. For instance, Øvretveit and Gustafson (2002) reveal the complexity of demonstrating causality links between outcome indicators and noticeable quality improvement as a result of the accreditation process. Other researchers such as Rooney and Van Ostenberg (1999) and de Walcque et al. (2008) criticise the use of 'objective' indicators in accreditation programmes since a large number of indicators are mainly concerned with the measurement of easier and less costly aspects of organisational structures and processes overlooking the practical value and improvement consequences of measures related to patients' outputs and outcomes.

Appendix A provides an overview of findings in the literature on the main positive and negative effects of healthcare accreditation.

2.6 Chapter summary

This chapter presented an overview of recent developments in the field of performance measurement and management systems. Contemporary PMSs as opposed to more traditional systems are characterised by a variety of financial and non-financial measures linked to strategic objectives to provide a more

comprehensive picture of organisational performance (Franco-Santos et al., 2012). In addition, the chapter provided a review of performance management in the healthcare context emphasising the proliferation of accounting & management techniques and health systems reforms inspired by the NPM philosophy. The chapter also stressed the complexity of measuring some elements of healthcare objectives because of their intangible character. For instance, reductions in efficiency incorporated both cost control and quality improvement. Whereas cost was viewed as relatively measurable and quantifiable, quality was seen as a multidimensional and abstract construct difficult to measure. Prior studies on the association between cost and quality in healthcare provided mixed findings on the relationship between cost and quality (Hussey et al., 2013).

In addition, the chapter presented healthcare accreditation as an external MCS where performance measurement and management were used as critical elements to evaluate compliance to evidence-based standards and quality improvement of the services provided. Contemporary healthcare accreditation was portrayed as a 'hybrid' model (Greenfield et al., 2016) embracing both compliance and quality improvement. An extensive analysis of previous literature reviews on this topic (i.e., Greenfield and Braithwaite, 2008; Hinchcliff et al., 2012; Jaafaripooyan et al., 2014; Ng et al., 2014; Brubakk et al., 2015; Nicklin, 2015) also revealed a number of benefits and shortcomings of having a certificate of accreditation. Positive and negative effects in relation to the management of medical/non-medical processes were noted. Overall, there was uncertainty and no real agreement concerning the impact of accreditation on organisational performance and effectiveness in enhancing clinical quality and patients outputs and outcomes (Greenfield and Braithwaite, 2008; Pomey et al., 2010; Hinchcliff et al., 2012). However, healthcare accreditation was viewed as a mechanism which played a pivotal role in promoting organisational changes (Duckett, 1983; Scrivens et al., 1995; Pomey et al., 2004, 2010; Greenfield et al., 2012).

CHAPTER 3: ENABLING AND COERCIVE FORMALISATION

3.1 Introduction

This chapter provides an overview of the theoretical lens used in this study. It starts with a brief introduction of MCSs to show how organisations manage conflicting objectives. Next, the chapter focuses on the enabling/coercive framework to describe its key formalisation features based on both the original view of Adler and Borys (1996) and further studies applying the theoretical framework. Then, the association between design and use of control systems is discussed, along with differences between internal and external control systems. Next, the relevance and value of applying the enabling/coercive framework in the context of public sector organisations is considered. Following this, the chapter examines the distinction between enabling/coercive features of formalisation and how individuals perceive control systems based on their attitudes (positive, negative, neutral) towards formalisation. Then, the chapter presents the concept of ambivalence to describe situations where individuals hold simultaneous positive and negative orientations towards formalisation. Finally, a concluding section summarises the key points of the chapter.

3.2 Management control systems

In the last two decades, the management accounting literature has seen a growing proliferation of different approaches to conceptualising MCSs[15] (Simons, 1995; Langfield-Smith, 1997; Ahrens and Chapman, 2004; Chenhall, 2007; Malmi and Brown, 2008; Adler, 2011; Franco-Santos et al., 2012). While there is an overall agreement that management control is concerned with managers' influence over employees to achieve organisational objectives (Hall, 2008; Berry et al., 2009;

[15] Definitions of MCSs widely used in the literature include: "systems that ensure congruence between the organization and its employees in objectives and strategies" (Merchant and Van der Stede, 2012, p. 5), "system(s) used by management to control the activities of an organization" (Anthony and Govindarajan, 2007, p. 17) and "the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities" (Simons, 1995, p. 5).

Merchant and Van der Stede, 2012), these approaches frequently involve the examination of control systems based on two different views. One stream of literature examines control features based on dual functions or roles such as diagnostic/interactive styles of use (Simons, 1995) and coercive/enabling formalisation (Ahrens and Chapman, 2004). Another stream of literature focuses on examining more comprehensive and holistic management control and performance management systems (i.e., Malmi and Brown, 2008; Broadbent and Laughlin, 2009; Ferreira and Otley, 2009; Adler, 2011). This coexistence and diversity of viewpoints create some challenges for researchers because of the inconsistent terminology used to conceptualise similar control processes and activities (Chenhall, 2007; Malmi and Brown, 2008; Berry et al., 2009; Adler, 2011; Tessier and Otley, 2012)[16].

In practice and regardless of the approach taken to examine MCSs, the use of management control requires a combination of enforced mechanisms as well as a set of practices supporting cooperation amongst employees (Merchant and Van der Stede, 2012). MCSs are commonly viewed as organisational processes and practices with two complementary functions (Mundy, 2010; Tessier and Otley, 2012; Ylinen and Gullkvist, 2014). They are used to control the achievement of organisational strategic objectives and to assist employees in seeking new opportunities and innovative ways of doing things (Simons, 1995; Ahrens and Chapman, 2004). These opposing and sometimes conflicting interests require managing organisational goals while providing employees with some degree of autonomy and flexibility in decision-making and problem-solving situations (Speklé, 2001; Sprinkle, 2003; Chenhall, 2007; Tessier and Otley, 2012).

Therefore, difficulties very often arise because there is a misalignment between the objectives pursued by management and employees. For example, Merchant and Van der Stede (2012) argue that these difficulties are normally related to lack of direction, motivational problems and personal limitations. Lack of direction includes situations where individuals do not fully understand what the organisation expects from them because strategies and objectives are not properly

[16] For example, Chenhall (2007) indicates that definitions of management control and MCSs are complex because of the interchangeable use of similar terminology, the evolving meaning of control, the overlap with other research disciplines and the variety of different theoretical approaches used within the management accounting literature.

communicated. Motivational problems can take place due to the misalignment of expectations between organisations and their individuals due to inadequate or incomplete incentives and rewards mechanisms. Management needs to adopt appropriate measures to motivate those individuals who are not willing to perform in the best organisational interests. In addition, personal limitations represent the lack of individual capabilities (i.e., limited experience and training by employees) to accomplish organisational objectives. While well designed systems can improve organisational performance, there are not universal guidelines to guarantee successful implementation and use. As a result of these difficulties, the management accounting literature has attempted to illustrate through different control taxonomies and frameworks how to overcome potential misalignments between individuals' behaviours and the strategies and goals pursued by organisations. One such framework is enabling/coercive formalisation (Adler and Borys, 1996; Ahrens and Chapman, 2004) and this is discussed in the next section.

3.3 'Enabling and coercive' formalisation and its key features

The 'coercive/enabling' (Adler and Borys, 1996) approach provides useful insights on how different forms of control are used to manage the potential benefits and shortcomings of bureaucratic formalisation[17] (Adler and Borys, 1996). On the one hand, the benefits of formalisation include improvement in terms of efficiency, task assistance, work satisfaction and encouragement of innovation (if it integrates previous experiences) as well as reductions related to role ambiguity, role conflict and feelings of stress and alienation. On the other hand, the shortcomings of formalisation consist of increased absences and stress (physical and psychological) and reduced motivation, organisational commitment and job satisfaction.

Adler and Borys (1996) maintain that depending on the type of formalisation managers are confronted with (coercive vs. enabling), their attitudes to control will differ. Coercive systems are characterised by formal detailed rules to enforce compliance and control employee behaviour (sometimes by means of

[17] Adler and Borys (1996) refer to formalisation as a dimension of organisational structure related to "the extent of written rules, procedures, and instructions" (p.62). Similarly, Meirovich et al. (2007) defines formalisation as "a management structure that emphasizes compliance to standard operating procedures" (p.252).

sanctions/punishments), whereas enabling systems refer to rules and guidelines encouraging employees to develop their own capabilities, respond effectively to uncertainties and facilitate decision-making activities (Ahrens and Chapman, 2004). Additionally, Adler and Borys (1996) recognise the following key dimensions to achieve a better understanding of enabling/coercive formalisation: the four 'features' of the system (repair, internal transparency, global transparency, and flexibility)[18], the 'design' process, and the 'implementation' process[19].

In terms of the features of the system, Adler and Borys (1996) refer first to the *repair* dimension as a 'design' principle that examines employees' autonomy to deviate from existing rules in order to improve or change processes. In coercive systems, rules and guidelines are designed to decrease shirking and are used as a control instrument by management to examine whether employees follow current regulation and procedures. Employees have restricted opportunities to use their own judgement to resolve challenging situations or identify actions for continuous improvement. On the contrary, enabling repair is designed to support employees by means of greater autonomy and enhanced opportunities to fix breakdowns and amend failures at work. Employees have a certain degree of freedom to recognise limitations and weaknesses of the processes within the system in order to overcome job contingencies. Overall, Adler and Borys (1996) recognise that enabling repair features are typically associated with opportunities for continuous improvement where employees can make suggestions, deviate from pre-established standards and engage in collaborative learning.

Repair is considered as a feature related to the "intelligence of the users" (Ahrens and Chapman, 2006a, p. 9) and examines the capacity and ability that employees have to fix problems associated with work processes and continue working without further interruptions (Ahrens and Chapman, 2004; Chapman and Kihn, 2009). Prior studies in the field (Cools et al., 2008; Wouters and Wilderom, 2008; Jørgensen and

[18] Adler and Borys (1996) use prior 'equipment design' literature related to deskilling and usability approaches to identify these four basic features.

[19] Adler and Borys (1996) argue that the alignment between the design characteristics and usability of controls will lead to its planned or intended consequences. In contrast, a mismatch between design features and usability will cause unintended or even dysfunctional outcomes. An example of these unintended consequences is the concept of 'mock bureaucracy' (Gouldner, 1954) which reflects how managers and employees are aware of certain organisational rules but they intentionally decide to ignore them because neither party wishes to enforce these rules (i.e., rules are promoted due to its symbolic attributes but ignored in real practices).

Messner, 2009) emphasise that not everything can be predicted and systems should allow users some degree of intellectual work and freedom to decide suitable options when dealing with unanticipated situations. Instruments that comprise enabling features incorporate information about tasks and procedures in order to achieve predetermined objectives. They also look for answers or alternative explanations for potential difficulties. Therefore, repair examines how "accounting controls and performance measurement can be designed as foolproof systems or be amenable to the user's intervention in an unforeseen event" (Ahrens and Chapman, 2006a, p. 9). Recent studies point out that enabling repair involves managers' consent and ability to modify the definition and measurement of performance indicators (Wouters and Wilderom, 2008) or the encouragement of knowledge creation by using prototypes and experimenting with contextualised data (Wouters and Roijmans, 2011).

Second, *internal transparency* or "glass box design" (Adler and Borys, 1996, p. 72) represents the degree of available information for employees to recognise and understand the internal logic of the system. Internal transparency under coercive mechanisms is low because employees are only expected to put into practice work instructions without having a clear comprehension of their local implications. Quite the opposite is the situation when employees are provided with knowledge about the critical elements of a process and understand the internal logic and practices within the system. Situations where a manual becomes a working instrument and employees have feedback on their performance are used by Adler and Borys (1996) as illustrations of enabling internal transparency.

Previous studies (Free, 2007; Cools et al., 2008; Wouters and Wilderom, 2008) emphasise, for instance, that enabling instruments help to elucidate the key elements of processes and activities carried out in the organisational departments or business units, facilitate a better understanding and clear visibility of these processes, and deliver fast and appropriate feedback to users by offering different measures and indicators to enhance performance evaluation. Enabling internal transparency also provides a better understanding of how local processes work (Ahrens and Chapman, 2004; Chapman and Kihn, 2009) by managers communicating to others the target values for performance (Ahrens and Chapman, 2004) and using budgeting practices as mechanisms that clarify activities, increase

operational knowledge and provide greater comprehension of revenue/costs association in businesses units (Chapman and Kihn, 2009).

Third, *global transparency* is described by Adler and Borys (1996) as the interpretation of employees of the overall system in which they operate. Enabling global transparency provides broader information to managers and employees so they can envisage the overall context and understand the association between local activities and organisational goals and strategies. It is not just about delegation and decentralisation, but also about greater understanding by users of the general picture of the organisation. Systems that support working training programs and groups' discussions with ongoing feedback channels between supervisors and employees are examples of enabling global transparency. In contrast, coercive formalisation only provides broad information to management because employees routinely complete their individual tasks and duties without being aware of the strategies and objectives pursued by their organisations. Employees' understanding and knowledge of the system is restricted to their working area.

Global transparency represents how and where local processes fit into the overall organisational structure (Ahrens and Chapman, 2004; Chapman and Kihn, 2009). In order to react to unexpected incidents and events, systems should provide 'visibility' of the overall context (Free, 2007; Cools et al., 2008) as well as some meaning and significance to the alignment between local activities and general organisational strategies, objectives, targets, and plans. In the context of budgeting practices, Chapman and Kihn (2009) indicate that global transparency is achieved when budgets increase managers' understanding of the organisational strategy. Free (2007) also illustrates that global transparency is enhanced when information sharing between retailers and international suppliers involve activities related to proactive supplier participation, joint forecasting and cost sharing. In addition, Ahrens and Chapman (2004) in their restaurant's chain study emphasise that even in one particular region, global transparency goes beyond restaurant's departments and reaches "other restaurants and leisure businesses" (p.284)[20].

[20] The differentiation between 'internal transparency' and 'global transparency' is complex. For example, Dowling and Leech (2014) recognise that sometimes this differentiation is arbitrary and should de delimited by the research question/s.

Lastly, *flexibility* is portrayed by Adler and Borys (1996) as the extent to which formal systems provide employees with different choices and alternatives to proceed in completing their tasks. It refers to the level of discretion that employees have over the use of a specific system and represents whether or not systems have the capacity to provide guidance and make suggestions. Due to the fact that unrestricted flexibility could have detrimental consequences, organisations need to create and develop mechanisms and boundaries to control areas of responsibility. Coercive flexibility suggests that users follow a sequence of phases based on strict rules and protocols where opportunities for using shortcuts and skipping steps within a system are highly restricted. Management approval is required when employees intend to deviate from existing rules and protocols. Conversely, enabling flexibility contemplates deviations or divergences from written and formal regulation as a learning opportunity to enhance system's effectiveness. There is also a possibility that users might adapt processes to their specific tasks and needs.

Previous studies interpret flexibility as the extent of discretion and judgement of organisational members over control processes and practices (Ahrens and Chapman, 2004; Chapman and Kihn, 2009) and the level of freedom of these members to decide how to use the system or processes (Jørgensen and Messner, 2009). Flexible systems with enabling features will encourage users to adjust and adapt instruments to their particular needs or requirements to 'customise' their processes (Free, 2007) making them more 'functional' (Wouters and Wilderom, 2008). Jørgensen and Messner (2009) in their study about a process control system for product development exemplify how specific guidelines were modified or adjusted to suit the individual development product characteristics.

3.4 The association between design and use of control systems

Although the management control literature describes 'design' and 'use' as two different issues (Neely et al., 2000; Berry et al., 2009; Ferreira and Otley, 2009; Micheli and Manzoni, 2010; Sundin et al., 2010; Cugueró-Escofet and Rosanas, 2013) there is a general consensus that both elements are strongly intertwined (Henri, 2008; Agostino and Arnaboldi, 2012). Prior studies investigating design/use issues have tended to examine the relevance of one aspect (design features or styles

of use). However, some researchers have also recognised other key aspects such as 'implementation', 'maintenance' and 'revision' (Neely et al., 2000; Henri, 2008). Nonetheless, the dearth of research examining the links between design and use in the PMSs literature has been noted (Henri, 2008). Henri's (2006a) study is one of the few exceptions that provide evidence that both phases are interrelated showing the influence of use over design in situations where monitoring use is related to the prevalence of financial indicators and strategic use is primarily associated with non-financial indicators.

In the context of enabling/coercive control, the framework was originally developed to investigate 'design' and 'implementation' of bureaucratic formalisation (Adler and Borys, 1996) but it has also been applied to examine features related to the use of control systems. Since Ahrens and Chapman's (2004) introduction of the framework in the management accounting literature to illustrate how particular features of design encourages an enabling use of control systems in the simultaneous pursuit of efficiency and flexibility, researchers have examined design features to understand how and why control systems might be used to assist or constrain operational management. Research on the enabling/coercive framework can at times appear fragmented and inconsistent as studies have examined different phases of the design/use continuum. For example, studies have investigated enabling/coercive features associated with 'design' (Groen et al., 2012), 'design and implementation' (Wouters and Wilderom, 2008; Wouters, 2009; Wouters and Roijmans, 2011), 'implementation and use' (Free, 2007; Jørgensen and Messner, 2009; Jordan and Messner, 2012), 'use' (Ahrens and Chapman, 2004; Naranjo-Gil and Hartmann, 2006; Cools et al., 2008; Chapman and Kihn, 2009; Chenhall et al., 2010; Hartmann and Maas, 2011; Mahama and Cheng, 2013; Heumann et al., 2014; Neu et al., 2014), and 'design, implementation, and use' (Hald and Mouritsen, 2013)[21]. In general, there are few examples of enabling/coercive studies that focus on both 'design and use' of control systems, except for Dowling and Leech's (2014) study set in the audit context. Dowling and Leech (2014) argue that previous studies on the enabling/coercive framework

[21] Some studies also examine more than one phase of control but only apply the coercive/enabling framework to one of the phases. For example, Cools et al. (2008) apply the enabling/coercive framework to examine the use of controls but use as well the 'organising-planning-evaluating-rewarding controls' framework (Chow et al., 1999) to examine the design of controls.

focusing exclusively on features of design *or* use of control provide a partial and limited understanding of the framework and its potential implications for individual/collective perceptions of the systems.

Adler and Borys (1996) emphasise that the 'design' of coercive and enabling systems is very different. Coercive formalisation is seen as 'equipment' designed to foolproof the process and decrease dependence on the skills and capabilities of users due to its deskilling logic (Adler and Borys, 1996; Adler, 1999). It is often driven by external motivation founded on authority enforcement, rule compliance and fear of punishment (Andringa, 2015). Coercive systems also imply that employees are not involved in the design stages of the process as systems are externally developed by technical experts unrelated to the organisation (Jørgensen and Messner, 2009). Those in charge of developing the initial configurations are the team designers of the system, because they have the expertise and experience to reduce start-up costs and avoid unnecessary adjustments after the implementation. On the contrary, enabling formalisation is seen as 'equipment' designed to encourage and improve usability and abilities of users (Adler and Borys, 1996; Adler, 1999). It promotes participation and collaboration amongst employees to improve the configuration of the design process, particularly in the initial phases of the process when specification, development and test of features are further needed (Jørgensen and Messner, 2009). Personnel training and management development are also common under enabling systems. Employees' suggestions and the use of prototypes in early phases are normally used to reconfigure operations and processes to enhance the effectiveness and flexibility of the system.

Furthermore, organisations need effective mechanisms to implement and use management systems. The 'implementation' following a coercive approach involves a 'command and control' authoritarian style derived from a top-down approach (Ahrens and Chapman, 2004). Training of employees is limited to specific and specialised operational skills in order to reduce costs. Enabling systems, on the other side, involve participative rather than autocratic implementation processes (Adler and Borys, 1996). Training is much deeper and comprehensive in order to incorporate users' capabilities, knowledge and expertise. The process itself becomes more participative promoting a learning culture where bottom-up

management approaches are not considered an exception. For instance, Wouters and Wilderom (2008) suggest that enabling PMSs should be designed and also implemented following an approach based on employees' professionalism and organisational experience, encouragement of experimentation with performance measures, and promotion of transparency by means of enhanced collaboration amongst individuals.

Although enabling systems may to some extent require significant resources in terms of training and management, evidence suggests that higher employees' participation and involvement in organisational processes promote flexible responses to unforeseen work difficulties, higher levels of satisfaction and motivation, and individual and collective organisational learning, even in environments where mass-production and low-cost strategies are paramount (Adler and Cole, 1993; Adler, 1999). Therefore, enabling systems should normally be preferred to coercive systems (Adler and Borys, 1996) since they support the achievement of strategic objectives hard to conciliate such as 'efficiency and flexibility' (Adler, 1999; Ahrens and Chapman, 2004; Wouters and Wilderom, 2008; Jørgensen and Messner, 2009), 'cost reduction and flexibility' (Naranjo-Gil and Hartmann, 2006), 'formalisation and decentralisation' (Meirovich et al., 2007), 'corporate policeman and business partner' (Hartmann and Maas, 2011) and 'compliance and engagement' (Dowling and Leech, 2014). Additional examples of enabling control mechanisms that provide beneficial results in terms of design and use of MCSs and organisational performance include experience-based development, time and autonomy to experiment, organisational professionalism, support and clear communication from top management, availability of modern IT systems (i.e., SAP), strategy alignment, and new opportunities to develop personal skills and capabilities (Wouters and Wilderom, 2008; Chapman and Kihn, 2009; Jørgensen and Messner, 2009; Wouters, 2009; Wouters and Roijmans, 2011; Groen et al., 2012; Jordan and Messner, 2012; Mahama and Cheng, 2013).

A number of studies also describe different forces that encourage or discourage the design and use of enabling/coercive formalisation (Adler and Borys, 1996; Adler, 1999; Touati and Pomey, 2009; Andringa, 2015). Adler and Borys (1996) reveal that while increased legitimacy, intensification of competitive pressure and automation support the enabling logic; asymmetries of power in organisations and

absence of reality checks inspire the coercive one. Adler (1999) also indicates that there are situations where enabling social structures are not always the preferable choice. He argues that enabling formalisation is less effective in competitive environments where cost is the predominant goal and settings requiring a great number of resources in terms of training and socialisation of individuals. Adler (1999) describes several factors that have the potential to hinder the diffusion of enabling formalisation. These include, for example, limited financial resources of organisations to invest in enabling systems (i.e., budget restrictions, struggles to recruit managers/employees wishing to adopt enabling approaches); legal, regulatory and social impediments which make enabling practices difficult to implement; adoption of management models that discourage enabling rationality (i.e., misalignment between the objectives pursued by managers and employees); and market positions that dissuade organisational effectiveness (i.e., organisations enjoying niche positions where multiple barriers cause limited competitive pressure). Interestingly, Touati and Pomey (2009) reinforce some of the previous arguments expressed by Adler and Borys (1996) and Adler (1999) and point to several contextual factors, which in the case of the healthcare accreditation context can encourage or restrain the development of enabling formalisation. These include the justification for legitimacy (i.e., collaborative cultures encourage enabling mechanisms), the distribution of power (i.e., asymmetrical power causes managers to blame employees for poor results, thus hindering learning activities), external incentives (i.e., organisations facing higher competition or demanding customers expected to encourage learning approaches) and institutional actors (some institutions like government bodies influence the kind of bureaucracy that operates in a particular environment). Lastly, Andringa (2015) reinforces the view that external pressures grounded on heavy regulation, imposed compliance, authority enforcement, and fear of punishment fosters the development of coercive formalisation.

3.5 Internal vs. external control systems and relevance of the four features

Literature on enabling/coercive formalisation to date has mainly focused on internal control systems (Ahrens and Chapman, 2004; Wouters and Wilderom, 2008;

Jørgensen and Messner, 2009; Jordan and Messner, 2012), with the exception of Touati and Pomey's (2009) study on hospital accreditation. However, the studies of Free (2007) and Cools et al. (2008) investigate control features in settings which share certain similarities with external control systems as they relate to organisations which are dependent on each other i.e., buyer-supplier relationship (Free, 2007) and multinational enterprise (Cools et al., 2008). For example, Free (2007) describes how 'repair' processes between buyers and suppliers can be based on relationships promoting 'single loop learning' (i.e., one-way communication from supplier to buyer) or 'double loop learning' (i.e., two-way communication between supplier and buyer) (Argyris, 1976). Whereas single loop learning is considered as a coercive feature of control, double loop learning is seen as an enabling feature that encourages enhanced collaboration (Free, 2007). Additionally, the 'parent-subsidiary' relationship in multinationals in Cool et al.'s, (2008) study shows similarities with potential relationships that could exist in the context of external control systems as 'subsidiaries' have to accept and follow 'parent' directives. They show how compliance with single tax pricing policy can contain a mix of coercive (repair and flexibility) and enabling (internal and global transparency) control features. Their findings also highlight the possibility that features could 'counterbalance' each other as they provide an example where both types of transparency increased but repair and flexibility decreased.

Findings from Cools et al. (2008) point to the possibility that the four design features of formalisation may not have equal importance. Their study "raises questions about the optimal balance between Ahrens and Chapman's (2004) dimensions of MCS use" (p. 624) as internal and global transparencies overshadowed repair and flexibility features. In their particular case, the use of a tax compliance policy in a coercive way resulted in a significant loss of repair and flexibility because the two transparencies increased bureaucracy and formalisation and had higher influence in the overall process. This view challenges the original conception of Adler and Borys (1996) in which similar significance is conferred on all the features. Dowling and Leech (2014) provides two potential explanations to justify why a system could be seen as enabling even if some of the four features of the system are basically coercive. First, the fact that the system in their study does not allow repair features (i.e., coercive feature) is seen as enabling by auditors

because it helps them to solve certain contingencies at work by building on their own expertise and knowledge. Second, they suggest that the expertise of factory workers in the context of Adler and Borys' (1996) study is not comparable to the abilities, skills and knowledge of highly professional and specialised groups like auditors. In addition, Kwon (2008)[22] based on a number of studies related to the association between bureaucracy and professional work (e.g., Dukerich et al., 1996; Golden et al., 2000) reinforces this point on differences between professional employees and factory employees. Kwon (2008) argues that bureaucratic processes like standardisation may not necessarily be perceived as hostile by professionals if they recognise the rationale and principles behind such processes and perceive the overall system as objective and fair.

The next section discusses the public sector context and the usefulness of the enabling/coercive framework in this context.

3.6 The importance of enabling/coercive formalisation in the public sector

The extent to which public and private sector organisations differ has been generally investigated by researchers based on a comparison of organisational structures such as procedures, rules, formalisation and bureaucracy to better understand potential advantages/disadvantages associated with each type of organisation (Kurland and Egan, 1999; Baarspul and Wilderom, 2011; Speklé and Verbeeten, 2015; van Helden and Reichard, 2016)[23]. As indicated previously, public sector organisations serve multiple stakeholders, pursue multiple objectives which sometimes conflict, and do not usually adhere to mechanisms and incentives linked to the market logics. For example, Kurland and Egan (1999) summarise the characteristics of public organisations in terms of "rigid rule structures, formalized job guidelines and responsibilities, formal means of communication, clear division

[22] Although Kwon (2008) does not apply the enabling/coercive framework as a theoretical lens, he uses similar ideas and concepts.

[23] Despite the large number of definitions regarding public and private sectors, there is an overall agreement in the literature that public and private sector organisations are part of a continuum in which public organisations can be defined as "city governments, agencies owned by the government, and entities funded with public monies" and private organisations as "entities that are owned by private individuals and that receive little or no funding through government contracts" (Kurland and Egan, 1999, p.439). Similarly, Baarspul and Wilderom (2011) refer to public sector organisation as "governmental agency" and private sector organisation as "for-profit business firm" (p.969).

of labor and hierarchical control, civil service systems, inflexible reward systems, strict reporting requirements, regulations, and constraints" (p. 438). Conversely, Kurland and Egan (1999) portray organisations in the private sector as mostly driven by the rationale of market preferences, which determines "flexibility and responsiveness in both process and outcomes for survival" and "are likely to be less encumbered by rules and regulations" (p. 438). The private sector is also more likely to use efficiency and profitability measures to evaluate the performance of organisations.

Similarly, van Helden and Reichard (2016) maintain that the four critical elements that differentiate public and private organisations are ownership, funding mechanisms, control systems and type of goals. Van Helden and Reichard (2016), based on prior work from Perry and Rainey (1988), describe the main differences of these four elements as follows. While *ownership* in public organisations is frequently retained by government bodies, private sector organisations belong to shareholders who have the possibility to transfer their property rights. In connection with *funding* mechanisms, public organisations are supported by the contributions of taxpayers while private organisations are funded through the sales of goods/services to the market and grounded on the association between the generation and consumption of resources. *Control* in public organisations is dependent on the power and needs of multiple stakeholders (at different hierarchical levels) who often need to comply with regulation and legislation, whereas control in private organisations is based on the logics of the market and the interests of the shareholders to increase their value. Lastly, *goals* of public organisations are primarily directed to protect public interests, policy-related objectives and public welfare. In contrast, private sector organisations are focused on delivering profits emphasising the financial dimension of businesses.

Van Helden and Reichard (2016) also emphasise that differences regarding organisational structures and degree of formalisation have relevant implications for control practices and impact on the behaviour of individuals. Due to the higher number of controls and accountability pressures attributable to public ownership and financial mechanisms, it is expected that the public sector will support the development of highly rigid and formalised rules and procedures which have the potential to decrease the motivation and satisfaction of individuals (Baarspul and

Wilderom, 2011)[24]. Therefore, divergences between public and private sectors will lead to different performance management practices.

Although some NPM supporters indicate that public and private sector organisations are converging towards similar practices (Poole et al., 2006), research shows that individuals in public organisations behave differently compared to individuals working in private sector organisations (Baarspul and Wilderom, 2011). For example, Speklé and Verbeeten (2015) maintain that despite the growing emphasis of NPM reforms for promoting economic rationality, greater efficiency and the adoption of more business-related styles of management (i.e. use of PMSs) in the public sector, differences between public and private sector organisations do exist. Speklé and Verbeeten (2015) argue that NPM reforms encourage control practices which are aligned to a certain degree with the coercive logic of formalisation based on "a rather mechanistic notion of performance contracting" (p. 131) to promote higher degree of effectiveness, efficiency, and accountability in the public sector by way of measuring predetermined performance targets to direct the attention of employees towards the organisational goals. As a result of this NPM emphasis on the use of coercive mechanisms to manage organisations, Cuganesan et al. (2014) support and reinforce the need to examine 'enabling' formalisation in the public sector to better understand how controls can also motivate and assist managers and lower-level employees to overcome the negative effects often created by the restrictive and bureaucratic nature of coercive formalisation. For example, recent work from Naranjo-Gil et al. (2016) points out that in the context of public healthcare, contemporary PMSs seem to promote a rather enabling use of control as opposed to traditional PMSs which encourage a more coercive one.

Based on these prior arguments, it is important to gain a more in-depth understanding of the extent to which an externally imposed system in a public sector context has enabling/coercive features and the consequent attitudes towards that system.

[24] Baarspul and Wilderom (2011) also recognise the complexity in comparing public and private sectors as prior studies have examined the behaviour of individuals at different levels, which include for example (i) *intra-individual orientation* based on general and personal 'values' (i.e., honesty, obedience) and 'risk' orientation; (ii) *individuals and their jobs* in terms of 'work values' (i.e., job security, work pay), 'motivation' (i.e., intrinsic vs. extrinsic rewards, status, autonomy, sense of community service, commitment to the public interest), 'job involvement' (i.e., higher loyalty and dedication) and 'job satisfaction'; and (iii) *individuals and their organisation* based on their 'organisational commitment'.

In addition, the examination of the enabling/coercive framework in the context of the public sector and the integration of prior findings in private organisations using this framework could enhance mutual learning for both research and practice. Research in the public sector can learn from the findings on the private sector using the enabling/coercive framework. For example, van Helden and Reichard (2016) find that the link between different strategies and design of PMSs is more developed and sophisticated in the private sector. They observed that private organisations have more elaborate internal MCSs to evaluate core practices and processes and have strong performance-based rewards systems in place to stimulate the achievement of targets. In line with the association between design and use of control system presented earlier in this chapter, van Helden and Reichard 2016) refer to 'design' and 'use' as two stages of the 'lifecycle of performance management' which require further attention in the context of public sector. For example, key decisions concerning organisational purposes, concepts and procedures need to be clearly specified in the 'design' stage to provide appropriate linkages between organisational objectives and performance measures (financial and non-financial). In terms of the 'use' stage, the intensity and the manner in which managers evaluate performance information could enhance deeper understanding on whether the style of use (i.e., rigid vs. flexible approaches) or/and the purpose (i.e., functional, rational, symbolic) of control have a critical influence on the behaviour of individuals. Using similar frameworks to examine control issues in public and private sector contexts increases the potential for public organisations to benefit from learning in the private sector as findings can be more easily compared and interpreted. Similarly, the private sector can also benefit from research studies in public settings to better understand how to manage the demands of varied stakeholders.

Despite prior interest in the public sector accounting literature in investigating issues associated with PMS flexibility and staff engagement (Guven-Uslu and Conrad, 2011), the applicability of the enabling/coercive framework in the public sector context remains underexplored.

3.7 Attitudes towards enabling/coercive formalisation

Recent calls for further research in the literature point to the need for a better understanding of differences between enabling/coercive formalisation and attitudes of individuals towards control (Tessier and Otley, 2012). While enabling/coercive control studies recognise the coexistence of the two types of control (Dowling and Leech, 2014) suggesting that they operate simultaneously (Ahrens and Chapman, 2004), are not mutually exclusive (Free, 2007), and form part of the same control continuum (Stansbury and Barry, 2007), research has tended to categorise them as positive and negative controls. Adler and Borys (1996) argue that whether formalisation is perceived positively or negatively by users is related to the type of formalisation (enabling or coercive) promoted by the control system. If employees understand that control systems help them to better master their functions and tasks, then enabling formalisation results in positive attitudinal outcomes[25]. On the contrary, if employees feel that managers use control systems based on compliance and enforcement principles, then coercive formalisation results in negative attitudinal outcomes. They refer to the concept of "necessary evil" (p. 82) to describe the coercive logic as inevitable but rarely depicted as positive.

Although there is a strong association between enabling features and positive attitudes and between coercive features and negative attitudes (i.e., as indicated in the previous footnote by Adler and Borys (1996) and Dowling and Leech (2014)), there is certainly some complexity surrounding these relationships. A number of recent studies question whether coercive formalisation is necessarily associated with negative attitudes and undesirable outcomes (Tessier and Otley, 2012; Dowling and Leech, 2014)[26]. For example, Dowling and Leech (2014) offer some

[25] For instance, Adler and Borys (1996, p. 75) emphasise that "depending of the relevance of the procedures to the employee, and assuming that the employees are given the appropriate training and resources, employee involvement in the formulation of procedures is likely to have a positive effect on both attitudinal and technical outcomes". Similarly, Dowling and Leech (2014) associate enabling system with positive response in terms of internal transparency using the following words: "The partners and managers were overwhelmingly positive about the features that enable monitoring" (p. 243); "Since nearly all of the features instantiating internal transparency facilitate monitoring, it is not surprising that the managers and partners view these features positively" (p. 243); and "Based on the auditors' positive response to the features instantiating internal transparency, we conclude that this system and the way the audit teams use it has enabled transparency to a high extent" (p. 245).

[26] Tessier and Otley (2012) suggest the use of 'constraining' as an alternative approach to moderate the negative and pejorative connotation of 'coercive'. Similarly Hald and Mouritsen (2013) refer to "enabling and constraining ERP" rather than enabling and coercive ERP.

examples in the audit context where some repair and flexibility coercive features are perceived positively. They provide illustrations of a system which causes dissatisfaction and frustration because of the limited guidance on how to deal with audit errors, but which is recognised as a learning opportunity to better understand the overall process to fix errors. Thus, a coercive repair feature of the system such as the absence of guidance to deal with errors results in positive attitudinal outcomes. Dowling and Leech (2014) also point out that even though some features of the system in their study could be viewed as threatening and intimidating because they offer limited flexibility to override the system and require the insertion of a recommendation in one of the boxes (a coercive feature), auditors perceive this as positive as it empowers their decision and strengthens their own confidence and competence[27].

Tessier and Otley (2012) also emphasise the relevance of separating the features of the system from the perceptions of employees towards the system. They point to a great deal of ambiguity and confusion in the grey area of 'role' of controls versus 'perceptions' of controls due to the fact that management 'intentions' (i.e., enabling/coercive), employees' 'attitudes' (i.e., positive, negative, neutral) and 'quality' of controls (good/bad) are strongly interrelated. They recognise that a plausible explanation for this confusion in the literature is that the original enabling/coercive framework by Adler and Borys (1996) has evolved from the quality of controls (good/bad), founded on its four design features, to the dual role of controls (enabling/coercive) based on the use of control systems (Ahrens and Chapman, 2004).

This view is supported by the fact that formal controls can be perceived differently by different people (Scott, 2001) and there are factors other than enabling/coercive control features than might have an impact on attitudes (Tessier and Otley, 2012). While Adler and Borys (1996) show different attitudes of managers and employees towards the ISO9000 international quality standard, Tessier and Otley (2012) describe SOX-related controls as a system that can be perceived as a restrictive instrument or an instrument to encourage employees to be responsible and meticulous. Tessier and Otley (2012) maintain that individuals perceive more

[27] Dowling and Leech (2014) refer to this type of flexibility as 'constrained' because it creates boundaries around how individuals tackle emerging and unexpected issues.

positively mechanisms such as SOX-related controls if their organisations have already in place numerous procedural controls and departments dealing with similar controls and processes. Additionally, they refer to the "presentation of controls" (p. 175) as a further mechanism which might have an impact on the perception of controls based on its mediator role between management intentions and employees attitudes towards control. Tessier and Otley (2012) provide the example of TQM and SOX compliance programmes to illustrate that although both approaches have similar characteristics (i.e., flow charts and exception reports), the fact that they can be presented and contextualised in different settings results in TQM being seen as a performance quality improvement instrument and SOX compliance as an imposed instrument to conform with current regulation.

Additionally, Adler and Borys (1996) and Tessier and Otley (2012) recognise the possibility of an intermediate and 'neutral' position between positive and negative attitudes towards formalisation. For example, Adler and Borys (1996) refer to this situation as formalisation that creates "neither positive nor negative responses" (p. 78)[28]. However, this neutral position does not capture simultaneous positive and negative emotional responses to control as discussed in the next section.

3.8 Ambivalence towards control systems

As previously mentioned in this chapter, there is a growing emphasis in the literature on achieving a better understanding of how organisations and their members manage contradictory and often conflicting practices and objectives (Mundy, 2010; Tessier and Otley, 2012; Ylinen and Gullkvist, 2014). A number of terms including paradox, contradiction, duality, dialects, double bind, dilemma, ambiguity or ambidexterity are frequently used by researchers (Ashforth et al., 2014)[29] to capture these "disorderly complexities of organizational life" and the

[28] Adler and Borys (1996) indicate that between enabling and coercive formalisation lies a 'zone of indifference' (Barnard, 1938).

[29] See Ashforth et al. (2014) for a comprehensive review of these terms. For example, differences between 'ambivalence' and 'paradox' can be summarised as follows. First, ambivalence denotes situations *'internal to the actor'* whereas paradox refers to situations *'external to actors'* (Ashforth et al., 2014). Second, ambivalence deals with *'orientations'* (Ashforth et al., 2014) whereas paradox is frequently used to understand *'tensions'* (Smith and Lewis, 2011). Third, ambivalence deals to a greater extent with *'intended/unintended'* and *'desirable/undesirable'* consequences (Eisenhardt, 2000; Piderit, 2000).

"dynamics of oppositional tendencies" (Ashforth and Reingen, 2014; p. 475). A combination of hostility and excitement of employees towards standardisation (Adler and Borys, 1996) or mixed reactions involving strong encouragement and resistance (Piderit, 2000) are good examples of contrasting attitudes of individuals towards different forms of formalisation.

This coexistence of favourable and unfavourable attitudes is consistent with an 'ambivalent' (Merton, 1976) orientation towards a system which has been discussed in recent literature. The original Latin word *'ambivalence'* refers to 'both' (ambi) and 'strong emotions' (valence) (Arribas-Ayllon and Bartlett, 2014), and symbolises the simultaneous presence of 'mixed feelings or thoughts about something or someone' (Merton, 1976; Piderit, 2000; Adler, 2012; Ashforth et al., 2014). Ashforth et al. (2014) define ambivalence as "simultaneously oppositional positive and negative orientations[30] toward an object" (p. 1454) and is frequently depicted as "having 'mixed feelings, being 'torn between conflicting impulses', or 'pulled in different directions" (p. 1454). Oreg and Sverdlik (2011) also share this viewpoint, but instead of using 'orientations' employ 'attitudes' to express those "positive and negative reactions to an object" (p. 337). Similarly, Piderit (2000) refers to ambivalence as a situation "where two alternatives perspectives are both strongly experienced" (p. 787).

Adler (1999) maintains that some of the contradictory perspectives to manage bureaucratic formalisation described in the enabling/coercive framework of Adler and Borys (1996) have the potential to result in ambivalence. This is also supported by Adler's (2012) interpretation that bureaucracy can be perceived by employees as a control mechanism that works simultaneously as coercive and enabling or "as a weapon and a tool" (p. 246). Adler (2012) argues that previous studies on bureaucracy have largely concentrated on the enabling features of formalisation to challenge the literature's findings on the negative effects of coercive systems for working processes and employees' motivations.

[30] 'Orientation denotes the actor's position (positive/negative) in relation to the object. Positive orientation represents 'attraction or a pull toward it' whereas negative orientation implies 'repulsion or a push away from it'. Ambivalence embraces 'cognition' (i.e., I think about X) and/or 'emotion' (i.e., I feel about X). Ambivalence takes place when cognitions clash, emotions clash, or cognitions and emotions clash (Ashforth et al., 2014).

Ambivalence can exist at different levels ranging from individual/collective to psychological/sociological (Adler, 2012; Ashforth et al., 2014). Whereas the sources of ambivalence at the psychological level are focused on 'personality' and its 'individual differences, relationships, and reactions' (Adler, 2012; Ashforth et al., 2014); 'norms and roles' are the sources for sociological ambivalence (Wang and Pratt, 2008; Ashforth et al., 2014) which integrates a wider perspective based on the 'social structure'. Following Merton's (1976) view, Adler (2012) emphasises that sociological ambivalence is due to "the incompatible normative expectations of attitudes, beliefs, and behaviour assigned to a position by an internally contradictory social structure" (p. 245). Besides, sociological ambivalence can incorporate both the individual (frequently related to psychological ambivalence) and the collective dimensions of organisations and its members (Adler, 2012). The role of ambivalence is seen as a valuable tool to link psychological and sociological interpretations recognising their 'irreducible complementarity' (Arribas-Ayllon and Bartlett, 2014).

In addition, Ashforth et al. (2014) argue that ambivalence is generally caused by the uncertainties of dynamic environments as well as the particular characteristics of organisational settings. They identify four types of organisational 'triggers', which can operate at individual and collective levels: (i) hybrid identities, contradictory goals, and role conflicts; (ii) organisational dualities; (iii) multifaceted objects; and (iv) temporal factors. For instance, *hybrid identities, contradictory goals, and role conflicts* might activate simultaneous positive and negative attitudes as a result of conflicting interests associated with providing high quality goods or services vs. economic profits (collective level) and achievement of professional goals vs. gender stereotypes (individual level). *Organisational dualities* are frequently motivated by situations that involve paradoxes or dilemmas and include examples concerning continuity vs. change, global vs. local emphasis, and competition vs. cooperation at collective level. They also involve experiences faced by individuals to be part of different collectives at organisational level (i.e., individualism vs. teamwork, past experiences vs. new experiences). *Multifaceted objects* could instigate oppositions and disagreements in terms of policies and cultures (collective level) and relationships and jobs (individual level). Familiarity with processes and systems provides greater degree of information but also might

accentuate potential limitations and imperfections. Finally, *temporal factors* are often linked with dynamic situations that initiate changes and ambiguity. Supportive vs. unsupportive approaches and integrity vs. unethical behaviours are examples provided by Ashforth et al. (2014) to illustrate the oppositional tendencies of temporal factors.

While research investigating ambivalence is rather limited in the accounting literature (Dambrin and Robson, 2011; Van der Kolk et al., 2015), there are a number of studies examining resistance and organisational change in the management field that recognise different psychological and sociological attributes to respond and adapt to ambivalence. For example, Vince and Broussine (1996) indicate that public service managers' reactions towards change processes frequently involve simultaneous and contrasting emotions related to fear and enthusiasm. Piderit (2000) also gives an account of three interviewees holding ambivalent attitudes towards resistance and organisational change based on a mix of positive and negative thoughts, emotions and behavioural intentions. In addition, Boiral (2003) reveals opposing attitudes towards the adoption and implementation of ISO 9000 standards. Boiral refers to 'ceremonial commentators' as a group of individuals who have mixed and ambiguous attitudes towards the ISO standard based on the fact that they "supported the certification project and actively helped to set up the documentation systems while recognizing its contradictions and aberrations" (Boiral, 2003; p. 731). Similarly, Boiral and Roy (2007) following previous Boiral's (2003) findings emphasise that 'ceremonial commentators' can be portrayed as individuals who believe that standards are largely justified by commercial pressures, but question their usefulness as a managerial tool ('ritual integrators') and internal improvement features ('ISO integrators').

Furthermore, the literature points to additional reasons that could explain the presence of ambivalence apart from those previously described by Ashforth et al. (2014). Jewell (2003) indicates that when individuals are getting close to a deadline, they feel more ambivalent towards the process. Meyerson and Scully (1995) argue as well that employees having ambivalence towards processes of change are viewed as effective facilitators because they offer a more comprehensive and pragmatic view of the potential threats and opportunities that their organisations need to face. Similarly, Plambeck and Weber (2010) maintain that when individuals develop a

'holistic' and comprehensive view of a particular subject, it is more likely to result in ambivalent attitudes. They argue that individuals who assess complex systems which integrate many features and elements are less likely to perceive the system as purely good or bad. In addition, Plambeck and Weber (2010) point to the capacity that organisations have to influence behaviour of individuals based on previous studies examining organisational beliefs, experiences, and role structures. Aspects such as cumulative experience, coherence of social role expectations, and diversity at structural levels can encourage top managers to examine strategic objectives from diverse and alternative viewpoints resulting in more ambivalent assessments.

Despite the fact that ambivalence is considered a common characteristic in many organisations (Piderit, 2000) and its beneficial consequences (i.e., innovation, creativity) and undesirable outcomes (i.e., behavioural vacillation, paralysis) are well recognised in the literature, the responses and reactions of organisational members to ambivalent orientations is still an underexplored research area (Ashforth et al., 2014).

3.9 Chapter summary

This chapter presented a review of the enabling/coercive framework (Adler and Borys, 1996) to understand how formalisation can enforce compliance and restrict behaviour of employees (coercive formalisation) and promote activities encouraging enhanced flexibility, freedom and visibility (enabling formalisation). It provided a description of the four key features of the framework (repair, internal transparency, global transparency, and flexibility) emphasising the association and differences between the design and use of control systems since the introduction of the framework in the management accounting literature by Ahrens and Chapman (2004). The chapter stressed the limited attention given in the literature to examining enabling/coercive formalisation in the context of external control systems as prior research has primarily focused on understanding enabling features related to the design, implementation or use of internal control systems. It also emphasised that despite prior interest in the public sector literature in examining many elements that resonate with the logics of the enabling/coercive framework,

the applicability and value of this framework the public sector context remains underexplored.

Additionally, the chapter presented recent developments examining the 'grey area' (Tessier and Otley, 2012) between enabling/coercive formalisation and attitudes of individuals (positive, negative, neutral) towards formalisation. Although some studies found exceptions (i.e., Dowling and Leech, 2014), research shows a general association between enabling formalisation and positive attitudes and between coercive formalisation and negative attitudes. However, it also introduced the notion of 'ambivalence' (Merton, 1976) to describe the coexistence of positive and negative attitudes of individuals towards formalisation (Adler, 2012). A number of triggers which could instigate ambivalence (Ashforth et al., 2014) and some examples in the management field related to ambivalence (i.e., Piderit, 2000; Boiral, 2003; Plambeck and Weber, 2010) were used to illustrate how individuals could have simultaneous positive and negative attitudes.

CHAPTER 4: METHODOLOGY AND RESEARCH METHODS

4.1 Introduction

This chapter describes the research methodology and methods applied in this study. It starts with the development of the research objectives and research questions. Then, it outlines the rationale for adopting a qualitative and interpretive approach, and presents the case study method as a suitable method to examine MCSs in two Spanish public hospitals. Next, the chapter describes the types of data gathered in the study (semi-structured interviews, archival data and documentation, and observations) and provides a description of the different steps adopted to analyse, interpret and theorise from the different sources of data. Finally, this chapter addresses ethical considerations and discusses steps taken to address common concerns related to the rigour and credibility of qualitative research.

4.2 Research objectives and research questions

Based on a review of performance measurement & management in healthcare literature (Chapter 2) and the enabling and coercive formalisation (Adler and Borys, 1996) literature (Chapter 3), this section presents the research objectives and research questions. The general objective of this research is to examine how an external MCS (the accreditation system) operates in a healthcare setting and its implications. Specifically, this study examines four different research questions, each of which is developed in this section.

4.2.1 Research Question 1: Role of accreditation system

Healthcare literature was reviewed in Chapter 2 to achieve a better understanding of how hospitals managed efficiency concerns in terms of cost/quality objectives. The literature stressed the critical function of accreditation as an external and highly formalised MCS capable of initiating changes and ensuring compliance and improvement of quality services (Touati and Pomey, 2009). The extent to which accreditation has changed the functioning of hospitals has been discussed in the literature to understand the role of accreditation as a ‘driver’ (Cooper et al., 2014)

for encouraging changes in clinical processes and activities of hospitals (Pomey et al., 2004; 2010; Greenfield and Braithwaite, 2008; Alkhenizan and Shaw, 2011; Hinchcliff et al., 2012). Recent views on accreditation perceive standards not only as an administrative and enforced exercise of 'box ticking' (Ahrens and Khalifa, 2015), but also as an improvement management tool that can be used as an internal mechanism to deliver higher performance by way of improving feedback and collaboration.

This view echoes recent calls in the healthcare accreditation to investigate appropriate levels of rigidity/flexibility (Greenfield et al., 2013) within accreditation programmes. Contemporary hospitals face a challenging situation in managing a highly formalised system to accomplish compulsory quality objectives required by governments and also provide some degree of flexibility to adapt organisational structures and allow autonomy to employees, even though hospitals have reduced latitude to do this. For example, the study of Touati and Pomey (2009) in the context of France (mandatory programme) and Canada (non-mandatory programme) shows that healthcare accreditation programmes can combine rigid and flexible features at the same time. Additionally, these views resonate with a recent study by Greenfield et al. (2016) in the Australian context which portrays healthcare accreditation as a 'hybrid' model encapsulating both assurance and quality enhancement. Their findings reveal that the hybrid model integrates both philosophies promoting the analysis of structures, processes and outcomes of healthcare standards to comply with minimum standards and engage with quality improvement practices.

The simultaneous pursuit of quality improvement and cost reduction is also seen as a crucial principle of healthcare accreditation (Rooney and Van Ostenberg, 1999; Shaw, 2004; Grepperud, 2015) to enhance efficiency and effectiveness. However, quality is not easily measured and often results in monitoring difficulties. The measurability and interdependency between cost and quality objectives have created numerous challenges because designers, users and observers frequently have different expectations (Shaw, 2003b) and there is a variety of approaches to performance measurement (i.e., structures, process, outcomes) and methods of capturing performance (i.e., people perceptions, objective indicators) which provide incomparable and inconsistent results. Overall, there is mixed and

inconclusive evidence in the literature on the effectiveness of accreditation in improving clinical quality and patients' outputs and outcomes (Greenfield and Braithwaite, 2008).

Hence, the aim of the first research question is to examine the current role of accreditation and this will provide a background to addressing the remaining questions. The first question of this study is as follows:

RQ 1: What is the role of the accreditation system?

4.2.2 Research Questions 2 and 3: Enabling/coercive formalisation

As explained in Chapter 3, the enabling/coercive formalisation (Adler and Borys, 1996) provides a lens for achieving a better understanding of how formalised forms of controls can enforce conformity and constrain employees' behaviour (coercive formalisation) and encourage organisational processes and activities by way of delivering greater flexibility and transparency (enabling formalisation). This framework is useful for researchers to examine how the characteristics of MCSs have an impact on the viewpoint and approaches of employees towards control (Jørgensen and Messner, 2009). This is important because the literature has shown that enabling formalisation allows organisations to manage twofold objectives which present major challenges for modern organisations and are difficult to reconcile. Examples include 'efficiency and flexibility' (Adler, 1999; Ahrens and Chapman, 2004, Wouters and Wilderom, 2008; Jørgensen and Messner, 2009), 'cost reduction and flexibility' (Naranjo-Gil and Hartmann, 2006) and 'formalisation and decentralisation' (Meirovich et al., 2007). In the context of healthcare accreditation, the enabling/coercive framework could offer valuable insights to examine how enabling organisational practices in hospitals assist in the simultaneous pursuit of assurance and improvement of quality standards as well as cost reduction.

The literature on management control and performance management has typically differentiated design and use of systems as two separate elements (Henri, 2008; Berry et al., 2009; Ferreira and Otley, 2009; Agostino and Arnaboldi, 2012). Despite the fact that there is a general agreement that both elements are firmly connected (Agostino and Arnaboldi, 2012), the dearth of research exploring linkages between design and use is noted (Henri, 2008). This is relevant in the case

of the enabling/coercive formalisation as the original framework was developed for design and implementation of bureaucratic formalisation (Adler and Borys, 1996), but the introduction of the framework to the management accounting literature resulted in its application to examine the use of MCSs (Ahrens and Chapman, 2004). Due to the fact that studies have examined different phases of the design/use continuum, research appears at times inconsistent and fragmented. Focusing exclusively on features of design or use of control bears the risk of providing a limited and partial understanding of the framework (Dowling and Leech, 2014). Therefore, a comprehensive examination of the design and use features of the accreditation has the potential to provide a better understanding of the enabling and coercive nature of control systems.

Additionally, research examining the four basic features of the enabling/coercive framework (i.e., repair, internal transparency, global transparency, and flexibility) has primarily focused on the enabling/coercive formalisation in the context of internal control systems, with the exception of Touati and Pomey's (2009) study. Research has not addressed the suitability of the four features of the framework and the relative importance of each of these features for analysing externally imposed control systems. These issues are also of relevance for understanding findings on the coexistence of enabling and coercive control systems (Free, 2007; Cools et al., 2008) taking into account that pure types of enabling or coercive controls do not exist in reality (Ahrens and Chapman, 2004). This is relevant in the context of the public sector and more particularly in the case of healthcare accreditation where the evaluation of quality standards is complex because both enabling and coercive formalisation are integrated in the system (Touati and Pomey, 2009). Whereas formalised processes and external audits are seen as enabling features to enhance quality standards and promote greater transparency and collaboration, the accreditation is also perceived as a coercive tool capable of limiting adaptability to the users' needs and reducing organisational flexibility (Touati and Pomey, 2009).

Based on these arguments, the second and third research questions of this study examine:

RQ 2: How enabling/coercive is the design of the accreditation system?

RQ 3: How enabling/coercive is the use of the accreditation system?

4.2.3 Research Question 4: Attitudes of management towards the system

As set out in Chapter 3, Adler and Borys (1996) suggest that depending on the type of formalisation managers are confronted with, their attitudes to control differ. They indicate that if employees recognise that formalisation helps them to better master their jobs, then control systems are seen as enabling and positive. On the contrary, if employees believe that top managers use compliance and enforcement, formalisation is considered coercive and negative. However, a number of studies question whether coercive control is always linked to negative perceptions and undesirable outcomes and enabling control to positive perceptions and desirable outcomes (Adler, 1999; Tessier and Otley, 2012; Dowling and Leech, 2014). This represents a 'grey area' (Tessier and Otley, 2012) where the association between enabling/coercive formalisation and perceptions of individuals (i.e., positive, negative, neutral attitudes towards formalisation) can be ambiguous.

Adler and Borys (1996) and Tessier and Otley (2012) indicate that controls can be perceived differently by different people (managers vs. employees). Tessier and Otley (2012) also suggest the possibility that individuals could hold neutral attitudes towards control to denote neither a positive nor a negative attitude. However, a neutral attitude does not capture situations where individuals might hold positive and negative attitudes at the same time (Merton, 1976). Recent studies point to the possibility of ambivalence (Adler, 2012; Ashforth et al., 2014) to describe the coexistence of positive and negative attitudes towards formalisation. Ashforth et al. (2014) point to a number of triggers (hybrid identities, contradictory goals, and role conflicts; dualities; multifaceted objects; and temporal factors) which have the potential to activate and motivate ambivalent orientations.

Thus, the fourth research question of this research addresses:

> RQ 4: What are the attitudes of management towards the accreditation system and the triggers of those attitudes?

4.3 Qualitative and interpretive approach

Research can adopt different philosophical and methodological approaches to develop knowledge. These are founded on a number of ontological and

epistemological assumptions, which provide researchers with different ways to use theory and collect and analyse information (Ryan et al., 2002; Easterby-Smith et al., 2008; Gill and Johnson, 2010; Saunders et al., 2012; Silverman, 2013). While ontology refers to the assumptions of researchers about the nature of reality, epistemology indicates the manner in which researchers acquire knowledge about particular topics (Burrell and Morgan, 1979; Ryan et al., 2002; Easterby-Smith et al., 2008). Additionally, research methodologies can be positioned along the continuum of subjective/objective approach to social science (Burrell and Morgan, 1979) and broadly categorised as qualitative and quantitative research (Ryan et al., 2002; Walliman, 2011; Saunders et al., 2012).

In order to understand the role of accreditation and how external control systems are designed and used, a qualitative and interpretive approach is needed. By adopting this approach, the researcher aims to capture managerial perceptions towards control systems in real-life contexts emphasising the role of management accounting activities in everyday life, in its normal and commonplace settings. As described by Denzin and Lincoln (2011, p. 3) qualitative research is a "situated activity that locates the observer in the world" and "consists of a set of interpretive, material practices that make the world visible". Adopting a qualitative approach, material practices such as interviews, field notes and memos are used as powerful devices to transform the world into a number of representations that require an interpretive and naturalistic perspective to understand how it works (Denzin and Lincoln, 2011).

A qualitative research approach also allows an in-depth examination of complex contexts where different people, structures and procedures co-exist (Miles and Huberman, 1994; Patton, 2002; Ahrens and Chapman, 2006b; Creswell, 2009; Flick, 2009; Denzin and Lincoln, 2011). It supports the examination of cause/effect relationships when information is collected over a continued period of time and enables changes when new issues and ideas arise (Miles and Huberman, 1994). This flexibility and improvisation is effectively captured by Denzin and Lincoln (2011, p. 4) when comparing the skills of qualitative researchers with those of bricoleurs, quilt makers, jazz artists or film directors based on their abilities to perform very specific tasks to create "the sense that images, sounds, and understandings are blending together, overlapping, and forming a composite, a new creation".

Additionally, qualitative research is particularly valuable when used as "a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (Creswell, 2009, p. 4) and where there is a need to "stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (Denzin and Lincoln, 2011, p. 8). It embraces a wide range of empirical instruments available to researchers such as case study, personal perceptions and observations, 'in situ' experience, interviews, life stories, visual texts and introspection (Patton, 2002; Flick, 2009; Denzin and Lincoln, 2011; Marshall and Rossman, 2011). Therefore, its focus is based on meanings and understanding of what is happening and ideas are developed through induction rather than deduction[31] from data which tends to be qualitative, rich and subjective (Chua, 1986; Ryan et al., 2002; Gill and Johnson, 2010).

As part of this process, the role of theory is critical in qualitative research because methodology and methods are frequently linked to the theoretical view adopted to conduct investigations. Given (2008) indicates that theoretical frameworks often influence the way research questions and data collection and analysis are developed. In general, theory is understood as a group of concepts which help to describe and explain various phenomena (Llewellyn, 2003; Bryman and Bell, 2011; Walliman, 2011; Silverman, 2013). While theory in quantitative studies strives for identifying associations and finding causality between variables to build explanations by linking these associations into general theories to generalise findings (Ryan et al., 2002), theory in qualitative studies aims for understanding rather than hypothesis generation (Scapens, 2004). In this study, the enabling/coercive formalisation framework (Adler and Borys, 1996) is used as a theoretical lens to understand the contemporary role of hospital accreditation and how this particular system is designed and used.

[31] Gill and Johnson (2010) argue that 'induction' and 'deduction' are two different approaches frequently used in management research to examine philosophical and methodological stances. The key difference is that induction develops theory from the empirical observation of reality while deduction requires the creation of conceptual and theoretical structures which are tested by observation.

4.4 Case study approach

A case study is defined as "an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin, 2009, p. 18). It is a research strategy frequently used to understand the complexities and multifaceted aspects of social phenomena (Adams et al., 2006; Ahrens and Chapman, 2006b; Vaivio, 2008; Yin, 2009) and is considered suitable to address the research questions in this study as it aims to find answers and explanations for 'how' and 'why' situations (Yin, 2009). A case study uses varied sources of information to provide rich analyses (Yin, 2009), helps to identify the idiosyncrasies or peculiarities of particular processes (Eisenhardt, 1989), supports the development of historical perspectives (Cagnon, 2010) and provides theoretical explanations on how to improve the practices performed by individuals in their jobs (Corcoran et al., 2004). Due to its comprehensive nature for understanding real phenomena (i.e., how systems are constructed or why individuals get involved), Cagnon (2010) highlights three different roles of the case method identified in prior research: (i) theory building; (ii) theory validating; and (iii) theory creating (by combining the two first processes). Similarly, Woodside and Wilson (2003) indicate that it is an effective tool for describing, explaining, predicting and controlling procedures and activities at different levels (individual, group and organisation).

A case study can be classified in multiple categories depending, for example, on the research aim, scope, individuals involved in the process, size of the investigation, theories tested and modes of analysis (Woodside and Wilson, 2003; Adams et al., 2006; Vaivio, 2008[32]; Creswell, 2009; Flick, 2009; Yin, 2009; Gary, 2011). According to Yin (2009, pp. 7-8), the most common classification of case study is based on the purpose of the research: descriptive, explanatory and exploratory[33]. While 'descriptive' case studies involve the presentation and illustration by the researcher of a theory by means of describing and portraying a particular

[32] For example, Vaivio (2008) uses the work of Keating (1995) to emphasise that the research scope of case studies (i.e., the findings in theoretical terms) can be classified in terms of theory discovery, theory refinement and theory refutation.

[33] Scapens (2004) also adds to this classification two extra types of case study: 'illustrative' and 'experimental'.

phenomenon, an ‘explanatory’ case study is a useful approach in complex and multidimensional cases where the researcher aims to find answers to causal situations. Pattern-matching methods are normally used in explanatory case studies to find links between various sets of information and different theoretical approaches. ‘Exploratory’ case studies are seen as the preface stage involving several propositions with the purpose to create or develop a theory. Exploratory cases generally take place when existing research is limited and theoretical statements are not well developed. Yin (2009) also emphasises the potential overlaps amongst these three types of case studies.

Another type of classification frequently used to categorise case studies is based on the type of design: single or multiple case studies (Creswell, 2009; Flick, 2009; Yin, 2009; Gary, 2011). A single case study is particularly appropriate in situations where there is a need to test an existing and well developed theoretical approach, examine a unique or extreme phenomenon, investigate typical or representative cases, generate relevant findings, and adopt longitudinal research (Yin, 2009). Conversely, Yin (2009) emphasises that multiple case studies are preferred when the researcher has sufficient resources and availability in terms of choices. Contrasting or replicating different phenomena (which include at least two cases) supports the use of multiple case studies in the same research project.

As with any type of research approach, case studies have a number of potential disadvantages (Yin, 2009; Cagnon, 2010). Cagnon (2010) points to their time-consuming nature for researchers and individuals being examined, challenges in demonstrating external validity of findings because of the complexity of replicating the same study, and their inappropriateness for providing general or universal results. Despite these potential disadvantages, examining control issues through case studies and field-based research has the potential to achieve a better understanding of the relationship between design/use of control systems and how organisations work in practice (Aidemark and Funck, 2009; Berry et al., 2009; Kastberg and Siverbo, 2013). Thus, the case study method is selected to address the research questions in this study.

In general, the nature of this study is largely explanatory, even though there are some elements which can be considered as descriptive and exploratory. For

example, Research Question 1 describes the 'role' of hospital accreditation as a quality assurance/quality improvement tool and Research Question 4 is exploratory in nature as previous research using the enabling and coercive framework (Adler and Borys, 1996) has not used this concept to explain the coexistence of positive and negative attitudes of individuals towards enabling/coercive formalisation. It is explanatory because this research aims to compare, analyse and interpret varied sets of information to make sense of findings and provide explanations for cause and effect associations (Patton, 2002) in two different settings. This research adopts a multiple case study based on two cases (i.e., Hospital S and Hospital L presented in the following section) to enhance the credibility and robustness of findings compared to a single case study approach (Eisenhardt, 1989; Miles and Huberman, 1994; Stake, 2005; Yin, 2009). Although the aim of this research is not to generalise findings to other settings, multiple case studies offer the possibility to create, explore and even challenge prior theoretical developments since comparison of findings from different cases is possible by replicating the processes for each setting (Yin, 2009; Saunders et al., 2012). This strategy is more compelling as comparisons can bring distinctive elements which were not noticeable in previous research.

The following section provides further details of sources of data which include semi-structured interviews, analysis of multiple documentation and non-participant observation.

4.5 Data collection

Qualitative case studies encompass a methodical approach based on collecting, organising and analysing data (Ahrens and Chapman, 2006b; Erikson and Kovalainen, 2008; Cagnon, 2010). As part of this process, information gathered during initial research phases plays a critical role to gaining access to the sites and understanding the contextual research setting. This section describes these initial steps in data collection and provides details of the key sources of data in this study (interviews, archival records and documentation, and direct observations).

4.5.1 Initial steps: selection criteria, gaining access and preliminary data

This study applies a purposeful sampling approach to select appropriate cases. Patton (2002) indicates that purposeful sampling (also referred to as judgement or purposive sampling) serves as a vehicle to understanding and explaining specific research questions. Ideally, case sites should comprise a rich variety of individuals, structures and procedures, a smooth and trustworthy relationship between the researcher/s and participants, and assurance of credible and reliable quality of information (Marshall and Rossman, 2011). The key feature of this approach is the alignment of sampling strategy and sample size with the research aims, research questions, resources available and limitations faced (Patton, 2002; Saunders et al., 2012).

Taking into account previous arguments, the initial design of this multiple case research included three public hospitals in one regional area of Spain, Catalonia. These hospitals had different sizes (i.e., large, medium and small). The selection of the case sites was based on similarities in terms of public ownership, willingness to participate, familiarity of the researcher with the geographical context, and potential comparability of theoretical concepts. However, after initial contacts with the hospitals and several interviews with key individuals, access difficulties arose in the medium size hospital due to potential privatisation of that hospital. Hence, this study addresses the research questions in two public hospitals: referred to as Hospital S and Hospital L to preserve anonymity and confidentiality.

Hospital S is a small basic general hospital with approximately 100 beds covering an area of reference of 50,000 people. Its foundation legal status indicates that it is a public non-profit hospital that works as an autonomous accountable organisation (López-Casasnovas et al., 2009). After experiencing some difficulties due to reductions of personnel and activity levels during 2010-2011, the hospital is going through a promising period resulting from the development of a new surgical procedure as well as several distinguished awards related to quality standards and innovation advances. It has also engaged in a number of strategic alliances and developed several collaborative projects with two hospitals in the same region to improve its coverage and efficiency levels.

In contrast, *Hospital L* is a large high-technology hospital with approximately 600 beds capacity and hospital of reference for almost half a million population. It is a government hospital with a traditional public model of governance. In this hospital, extremely complex cases are treated and surgical procedures involving the use of the latest technology and medical equipment are performed. It is also a teaching hospital and is one of the top performers in Spain in terms of high complexity medical care and research and development activities. For instance, since 2000 Hospital L has frequently been awarded prizes due to its level of excellence in quality standards and outstanding results based on operational and efficiency indicators. See Appendices B and C for detailed information on both hospitals in terms of activity levels, budget figures and organisational chart structures.

Differences in size and governance structures between the two hospitals facilitate an exploration of the impact of different contexts on the accreditation process. This is consistent with previous research such as Kastberg and Siverbo (2013) who examine design and use of management accounting systems in two different sized-hospitals (large teaching hospital vs. provincial hospitals). Using multiple sites can assist researchers to unveil potential causes for opposing views/findings in previous research (Lillis and Mundy, 2005) and give valuable insights for 'replication' and 'theory development' purposes (Scapens, 2004). It can also enhance external validity of results (Gibbert et al., 2008) by means of recognising similar patterns and improving data comparability and analysis reliability (Scapens, 1990). In the context of hospital accreditation, previous research has pointed to the absence of any tailoring of accreditation standards to different contexts (Touati and Pomey, 2009). Examining the same accreditation system in two very different settings facilitates an examination of the impact of the setting on perceptions and attitudes towards accreditation.

An additional and critical challenge faced by researchers is gaining access to research sites (Baxter and Chua, 1998; Gummesson, 2000; Patton, 2002; Shenton and Hayter, 2004). In this study, the researcher gained access to the case sites by establishing a relationship with suitable gatekeepers (Patton, 2002) based on trust and professionalism. In contacting the gatekeepers, the researcher approached a number of senior managers via email describing the main objectives of this research. This process resulted in two responses (hospitals M and L). In the case of

Hospital S, the researcher arranged a meeting with the hospital director through a personal contact working in the same hospital. In order to understand current challenges faced in the healthcare environment, four non-recorded pilot interviews[34] were completed during April and May 2012 and January 2013 with top managers in Hospital M and Hospital L and the hospital director in Hospital S. The topics discussed during the interviews were derived from the control and performance management literatures. Those interviews enabled discussion of some of the issues associated with control systems (i.e., budgeting systems, funding mechanisms, costing systems), different managerial instruments used for performance management and measurement (i.e., benchmarking tools, scorecards, dashboards, total quality management techniques) and key organisational objectives and goals. One of the main purposes of this initial stage was to confirm and secure access and plan further interviews with key informants. Therefore, purposive sampling (Patton, 2002; Free, 2007) was used for selecting organisational individuals familiar with the topics under examination and to secure potential interviewees for upcoming stages. This was helpful in identifying and linking the unit of analysis with the research questions examined (Yin, 2009). The unit of analysis in this study refers primarily to those individuals involved in managerial activities at top senior management (i.e., directors of departments) and top/middle management levels.

4.5.2 Sources of data

The characteristics of social and human systems within organisations can be explored using numerous sources of information in case studies (Ryan et al., 2002; Eriksson and Kovalainen, 2008; Yin, 2009; Cagnon, 2010). For example, Yin (2009) indicates that archival records, documentation, interviews, physical artefacts, direct observation and participant-observation are the six most widespread methods used in case study research. These methods are not mutually exclusive and a combination is recommended to provide a comprehensive view of the sites investigated (Patton, 2002; Woodside and Wilson, 2003; Yin, 2009). Data collection in this study consists of semi-structured interviews, different forms of archival records and documentation, and observational information. A meticulous

[34] For example, Yin (2009) recommends the use of a pilot study to collect initial data as it helps to refine and improve deficient design features related to the research process.

and rigorous approach comprising triangulation of data (Ahrens and Chapman, 2006b; Flick, 2009) is followed during the entire process to strengthen the reliability and credibility of the findings and analysis (Patton, 2002; Yin, 2009). The following subsections provide further details on the three key sources of data.

4.5.2.1 Interviews

Interviews are possibly the most common research method in qualitative studies (Ryan et al., 2002; Marginson, 2004; Yin, 2009; Marshall and Rossman, 2011; Bryman, 2012). They are frequently classified depending on their structure and format including categories such as structured, unstructured and semi-structured interviews; telephone interviews; face-to-face interviews and groups interviews (Fontana and Frey, 2003; Eriksson and Kovalainen, 2008; Creswell, 2009; Bryman, 2012). The most popular classification distinguishes between structured, unstructured and semi-structured interviews. Structured interviews involve a rigid and standardised approach in which participants answer the same set of questions in the same sequence or order (Fontana and Frey, 2003). In contrast, unstructured interviews are based on an open-ended strategy which relies on the natural and spontaneous flow of conversations (Patton, 2002; Given, 2008). An intermediate approach is the use of semi-structured interviews (Ryan et al., 2002; Horton et al., 2004), which allows the researcher sufficient freedom and flexibility while using a standardised protocol guide for asking questions (Patton, 2002; Horton et al., 2004; Marginson, 2004; Kvale, 2008). This method helps to capture particular issues that need to be answered in a limited period of time (Patton, 2002) and probes are often used to obtain supplementary information by following up prior questions (King and Horrocks, 2010).

Regardless of the type of structure, configuration and classification of interviews, their purpose is to better understand the respondent's view by finding out what is on his/her mind (Patton, 2002). They also facilitate control of the questions by the researcher, and enable the provision of historical information during the interviews (Rubin and Rubin, 2012). Kvale (2008) recognises that preparation in advance and certain capabilities and skills are critical for data collection using this method. While the first stages of the process involve a number of steps before starting the interview such as 'thematising' and designing, the latter stages include actions and

procedures related to interview data such as transcribing, analysing, verifying and reporting (Kvale, 2008). In line with the recommendations of Kvale (2008) and Yin (2009), particular attention was given to the following six stages: (i) research aims; (ii) interview schedule and selection of interviews; (iii) data gathering phases; (iv) transcribing; (v) analysis; and (vi) limitation of bias and reliability and validity.

(i) Research aims

First, the research aims were formulated. In order to ensure that key topics and themes were covered during the interviews, a systematic literature review was conducted before entering the field. This allowed a better understanding of recent developments in the healthcare context to design appropriate research questions. As much data as possible was collected prior to entering the field from public sources such as internet sites to gather information on the historical evolution, governance structures, financial resources, performance indicators and recent awards of the two hospitals.

(ii) Interview schedule and selection of interviewees

A semi-structured interview approach was selected as it offered the potential to reveal and create a comprehensive understanding of the experiences of participants on a specific research topic (Patton, 2002; Rubin and Rubin, 2012). It allowed enough flexibility and freedom to the researcher (Horton et al., 2004; Kvale, 2008) to examine issues arising during the course of the interviews in a limited period of time (Patton, 2002). Additionally, this type of approach was valuable to explore situations where respondents developed "retrospective (and prospective) accounts of versions of their past (or future) actions, experiences, feelings and thoughts" (Rapley, 2004, p. 16). This was relevant because this study took place after the design of the accreditation system and interviewees had time to reflect on accreditation issues in a retrospective manner.

An interview schedule was useful to "minimise bias through the pre-specification of non-directive questions and probes" (Lillis, 1999, p. 87). It was designed based on an insight of open/closed, natural/leading, direct/indirect and primary/secondary questions (Eriksson and Kovalainen, 2008). This stage was important in ensuring appropriate wording to facilitate clearer responses from interviewees and avoiding misunderstandings. At this point, the researcher realised that asking questions was

an ‘art’ (Patton, 2002) where preparation in advance was paramount. The researcher followed Patton’s (2002) suggestions in designing questions which were “open-ended, neutral, singular, and clear” (p. 295) in order to prevent dichotomous responses. Additionally, technical and theoretical terminology was avoided to increase clarity of questions.

The process of selecting interviewees was conducted in collaboration with the ‘gatekeepers’ of each hospital to ensure that designated participants were in a position to provide comprehensive and trustworthy information on the issues examined.

(iii) Data gathering phases

The third stage included a two-phased process of data collection in 2013 and 2014 based on forty-six face-to-face semi-structured interviews. Interview guides were used in both phases. While the first phase (June – August 2013) examined the suitability of the enabling/coercive framework (Adler and Borys, 1996) in the healthcare context to understand MCSs in general (i.e., scorecards, decision-making activities, organisational structure, budgets, information technology systems (i.e., SAP), regulation, accreditation, performance measurement, and meetings), the second phase (January – May 2014) focused on the four features (repair, internal transparency, global transparency, and flexibility) of the enabling/coercive framework to investigate the design and use of the acute care hospital accreditation. An example of an interview guide used in this second phase is provided in Appendix D.

The first phase of data collection comprised eighteen interviews with the directors/managers from the healthcare service departments (medical and nursing units) and supporting activities (accounting and finance, human resources, general services, maintenance, and information systems) in the selected hospitals during June – August 2013. During this first phase the critical role of the hospital accreditation system emerged. This phase was also indispensable in validating the applicability of the ‘enabling/coercive’ framework (Adler and Borys, 1996) in this healthcare context. The second phase was primarily carried out between January and May 2014 and consisted of twenty-eight interviews with top management teams, top/middle managers and several individuals from recognised institutions

familiar with the accreditation system (see Appendix E for a summary of the total number of interviews completed). The main objective was to examine the perceptions and attitudes of the participants towards the use of the acute care hospital accreditation system using the lens of the 'enabling/coercive' framework and its four key features (repair, flexibility, internal transparency and global transparency).

Where possible interviews were recorded (i.e. participants agreed to be recorded in thirty-four interviews). Hand-written comments and notes were used to support recorded and non-recorded interviews (Jankowicz, 2005). Of the non-recorded interviews, five were with members of the Catalan Health Department, who agreed to take part in the study if interviews were not recorded claiming political reasons behind their rationale.

During this stage the researcher paid close attention to personal introductions, right amount of information to be disclosed before the recording, moving from one topic to another, time management, and winding up and following up actions (Horton et al., 2004). At the beginning of each interview, an information sheet was provided to each interviewee indicating the nature and purpose of the research and rights/responsibilities of participants. Before recording the interviews, anonymity and confidentiality issues were addressed by the researcher to avoid misunderstandings and ethical infringements and also to obtain a written consent form signed by the interviewees (see Appendix F for a sample of this document). The thirty-four recorded interviews lasted on average forty minutes[35] and were conducted in a semi-structured manner to allow flexibility in investigating unexpected or unanticipated themes and topics. Interviews were conducted until 'theoretical saturation' was reached (Eisenhardt, 1989; Ahrens and Chapman, 2004; Suddaby, 2006; Dowling and Leech, 2014; Sutton and Brown, 2014). The researcher continued the interviews to the point where little novel information and no new insights were shared by respondents. Interviewees continued describing basically the same ideas and, at that point, the researcher recognised that collecting

[35] 1,360 minutes / 34 interviews = 40 minutes per interview. While the shortest interview lasted 10 minutes, the longest interview lasted 123 minutes. These figures did not include non-recorded time during recorded interviews, which averaged around 28 minutes (940 non-recorded minutes / 34 interviews). This non-recorded time was extremely valuable in overcoming any reluctance to discuss sensitive information.

more data would not produce new results as conceptual associations were appropriately described (Given, 2008).

Recorded interviews were also supplemented with detailed comments and notes taken during and directly after the process[36]. Notes were useful to ensure that recorded data was not lost due to technical failures and helped to describe certain observations not captured by the audio recording procedure. The sixteen non-recorded interviews (including the four non-recorded pilot interviews described in 4.5.1) lasted on average sixty-seven minutes[37].

(iv) Transcribing

Once the interview was finished, the fourth stage included the transcription of the material recorded from oral speech to written format (either in Spanish or Catalan languages[38]). This was a time-consuming procedure which was completed personally by the researcher immediately after the conclusion of interviews. As soon as the transcription was completed, the researcher listened to the recordings one more time to make sure that transcripts were accurate. Recorded interviews were fully transcribed and reported back to participants to corroborate the accuracy of the information[39].

The next two stages (*(v) data analysis*, and *(vi) limitation of bias and reliability and validity)* are covered in sections 4.6 and 4.7 which address all of the sources of data.

The following two sub-sections present the additional sources of data (archival records & documentation and observation) used in this research.

4.5.2.2 Archival records and documentation

Archival records and documentation sources are indispensable in improving case study credibility. According to Yin (2009), the main benefits of these methods

[36] For example, the sixty-minute train journey made by the researcher after the interviews was extremely helpful to reflect and summarise issues discussed during the interviews.

[37] 1,075 minutes / 16 interviews = 67.19 minutes per interview.

[38] From the 34 recorded interviews, 23 interviews were in Catalan language and 11 interviews were in Spanish language.

[39] In a very small number of circumstances, interviewees clarified particular remarks arising from their transcribed answers.

include unobtrusiveness, accuracy and precision (in terms of time, episodes, incidents and locations), the possibility of reviewing the data as many times as required, and their supportive role in reinforcing information provided by other sources such as interviews and observations. They also strengthen findings on views, opinions, beliefs, values and perceptions of participants (Patton, 2002; Flick, 2009; Marshall and Rossman, 2011; Bryman, 2012). A potential difficulty with this form of data is finding and gaining access to some archives and relevant documents which could result in incompleteness, biased selection processes and author bias (Yin, 2009). Therefore, systematic searching procedures are needed to ensure that records and documentation are continuously updated and fulfil a minimum set of standards and requirements (Gary, 2011).

In terms of archival records and documentation evidence, an extensive number of different primary and secondary data sources published since 2000 were accessed by the researcher. Some of these documents comprise organisational information related to strategic plans, annual reports, regional management reports, management awards, newsletters, and performance management and measurement systems. Additionally, internet searches provided valuable information regarding historical background and latest developments in the healthcare environment. A review of archival records and hospital documents (i.e., financial resources, activity levels, budgets, organisational charts, personnel information) proved to be helpful for understanding the specific characteristics of each site investigated. Some of these documents triggered further analysis of several topics (i.e. benchmarking, clinical operational processes and medical protocols) and assisted the researcher to refine some questions during the interviews process. For instance, document analysis of internal information (i.e., hospital reports, protocols, clinical process, improvement plans, and quality management reports) and external and governmental documents (related to the Catalan Health Department) helped to gain in-depth insight into the accreditation process and supported information collected through interviews and observational procedures. Sending remainder emails to interviewees was an effective strategy to secure relevant documents. Appendix G provides a summary of relevant documents used to examine the hospital accreditation system.

Overall, archival records and documentation were helpful in addressing the research questions examining the role of accreditation (RQ 1) and the features related to the design (RQ 2) and use (RQ 3) of the accreditation system.

4.5.2.3 Direct observations

Another valuable approach commonly used in case studies is direct observation (Patton, 2002; Yin, 2009; Cagnon, 2010; Gary, 2011; Bryman, 2012). It is a helpful method to enhance awareness and understanding of the real environmental context because it captures direct perceptions and experience of the phenomenon under investigation and gives the opportunity to observe events where participants may be reluctant to reveal details (Patton, 2002; Yin, 2009; Cagnon, 2010). Conversely, direct observation could be problematic because of financial and time restrictions and also due to potential reflexivity situations in which incidents and happenings might take place in a different way because they are observed or controlled (Yin, 2009).

In this particular research, four first-hand site visits of some of the hospital facilities (i.e., conference room in Hospital L, logistics & purchases department in Hospital L, Information Technology department in Hospital L, and surgical operations theatre in Hospital S) were used as an opportunity to observe *in situ* how individuals carried out their activities and practices. Data obtained from direct observations in this study was comparatively smaller than from interviews and archival records and documents, but was useful in understanding everyday practices and social behaviours in a particular setting without having influence in the field (Ostrower, 1998). Direct and non-participant observation also helped to recognise the value of informal ways of communication, which were very different from the formalised set of rules and guidelines intrinsic to the hospital accreditation process. For instance, having coffee with some participants before recording the interviews, the attendance at the annual general meeting in Hospital L, the morning session spent with the Logistics & Purchases Director in Hospital L and the opportunity to join the medical team in Hospital S during a surgical procedure (i.e., hip replacement operation) allowed the researcher to achieve a better understanding of how hospital resources are used to improve efficiency and quality standards. During

observational processes, field notes, post-event reflection notes and mobile phone pictures were taken.

4.6 Data analysis

Data analysis is considered one of the key stages in case studies (Miles and Huberman, 1994; Patton, 2002; Woodside and Wilson, 2003; O'Dwyer, 2004; Yin, 2009; Marshall and Rossman, 2011) and involves the application of a logical and meaningful approach to explore ideas, topics and statements amongst different categories to explain potential similarities and differences in the phenomenon under investigation (Cagnon, 2010; Marshall and Rossman, 2011). Miles and Huberman (1994) and O'Dwyer (2004) emphasise that this process integrates the combination of multiple activities such as data reduction, data display, and data interpretation using corroborations and conclusions. Although many of these techniques are used in the literature to illustrate how data should be analysed, there is not a unique and single data analysis strategy which is best (Patton, 2002; Yin, 2009). For instance, Yin (2009) highlights the following four strategies as helpful approaches in assisting researchers in analysing case studies: reliance on theoretical suggestions, development of description for each case examined, combining (if feasible) quantitative and qualitative information, and comparison against rival or opposing propositions. The approach preferred by most researchers is reliance on theoretical propositions as it encompasses the purposes and objectives of the study, research questions, literature review, and linkages between theoretical approaches and intended propositions (Yin, 2009). Thus, this study follows Yin's suggestions combining research questions and a theoretical approach to analyse data.

Additionally, scholars recommend the use of various multi-step and iterative analytical procedures to analyse research data (Yin, 2009; Cagnon, 2010; Marshall and Rossman, 2011). This study adopts Marshall and Rossman's (2011) approach using the following six analytical steps: organisation of data; data immersion; creation of categories and themes[40]; offering interpretations; searching for

[40] Although Marshall and Rossman (2011) incorporated an additional step called 'data coding' after the creation of categories and themes, the researcher did not use coding during the analytical data process. The researcher used thematic analysis rather than coding analysis as codes are normally created in data analysis following computer aided data analysis software.

alternative interpretations; and writing the report or presenting the study. The next paragraphs describe the overall process used in this investigation.

First, *organising data* required an initial process where raw data and information from interviews were transcribed, translated and saved in Word documents. The starting point was the generation of 'thick' (Geertz, 1973, p. 6) and 'thorough' (Dey, 1993, p. 31) comprehensive descriptions of the phenomena investigated. Separate files, folders and subfolders (i.e. date, place, event, job title) were used to divide data between different organisations. Documents and field notes were categorised using similar guidelines. Information was organised and managed based on different file directories. Second, *data immersion* included detailed and careful data reading from documents, notes and transcripts of interviews to increase familiarity with key and relevant information. Because of the variety of documents and length of data, various summaries were created to reduce content. These two initial steps involved significant reflection and judgement, creation of different categories based on interview data, positioning this information within theoretical models and frameworks, and development of associations between selected categories (Creswell, 2009). This included a circular process of qualitative data analysis based on "describing phenomena, classifying it, and seeing how our concepts interconnect" (Dey, 1993, p. 30).

Data was read and re-read several times to ensure thorough comprehension by the researcher. This process of familiarisation with data was valuable to identify, create, define and refine themes to collate information in a systematic manner. This third step involved the *creation of themes*[41] *and sub-themes* to provide some type of meaning and assist in the interpretation process and early development of findings and conclusions. The process followed a manual analysis of themes which run in parallel with the research questions, theoretical framework and other relevant concepts developed during different stages of this study. This analytical approach was a valuable method of analysing issues which were anticipated (i.e., based on literature reviews of selected topics) as well as issues emerging through the analytical process (Pope et al., 2006; Given, 2008; Grbich, 2013). Word documents

[41] Braun and Clarke (2006) indicates that "a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (p. 82).

were indispensable at this point to facilitate content and thematic analysis and assist in the identification of text passages describing a general phenomenon (O'Dwyer, 2004). Data display through the development of templates and tables was extremely important to emphasise critical themes and patterns emerging from the interviews analysis (Miles and Huberman, 1994).

The researcher used the appropriate literature in the healthcare context, the theoretical framework of Adler and Borys (1996) and the patterns arising from the qualitative data collected to capture relevant themes and address the four research questions of this study. For example, analysis of documents and transcripts of interviews related to the accreditation system carried out during the two phases of data collection were useful for organising data and presenting interviewees' opinions and perceptions of accreditation around the following themes: aims and objectives; standard weightings across the different dimensions; suitability for managing quality and costs; changes between the last two accreditation processes (2007-2008 vs. 2013-2014); advantages vs. disadvantages of accreditation; and enabling/coercive features (repair, internal transparency, global transparency, and flexibility) of accreditation. These themes were divided into several sub-themes[42]. A sample of sub-themes related to enabling/coercive features of 'global transparency' is contained in Appendix H.

Data reduction took place during these initial steps to condense the data set into different themes, sub-themes and categories (Dey, 1993; Miles and Huberman, 1994; Given, 2008; Flick, 2009). This process allowed aggregation of data in "higher order headings" (Graneheim and Lundman, 2004, p. 106) through the selection and transformation of large amounts of information into more manageable textual data (Miles and Huberman, 1994; Pope et al., 2006). While in the early stages, the researcher reduced data by way of editing, condensing and summarising information, in the middle stages, themes and sub-themes provided the basis for description. In later stages, concepts and explanations were used for data interpretation. The overall aim was to manage reductions in data volume and data specificity (i.e., events, incidents) without substantial loss of information while

[42] For example, in the case of *'changes between the last two accreditation processes'* theme, the next sub-themes emerged: format of documents; collaboration between hospitals; different economic context; changes in input required from hospitals; and changes in the auditing process.

capturing the real essence of the setting or context investigated (Miles and Huberman, 1994; Gahan and Hannibal, 1998). Overall, this thematic process was viewed as a helpful and suitable analysis method for researchers in early "qualitative research careers" (Braun and Clarke, 2006, p. 81) to capture and unify key concepts within the data set because information could be appropriately "segmented, categorized, summarized, and reconstructed" (Given, 2008, p. 687).

Next, *offering interpretations* was critical to make sense of all themes and classifications. For example, Patton (2002) referred to this phase as giving coherence to findings by offering explanations, making inferences and providing conclusions in a systematic and organised manner. A complete rereading of the interviews and notes was carried out again to enable a coherent description of the findings. This process included the selection of illustrative quotes to emphasise the main findings. Before writing the final report of this study including findings and discussion of findings, a *search for alternative explanations* was considered critical. Data was re-examined to assess if it fitted emerging patterns and the researcher searched for negative evidence (Miles and Huberman, 1994) which might contradict emerging patterns. This "continuous back and forth questioning of interpretations and discussion of recorded field data" (Ahrens and Chapman, 2006b, p. 833) demands time, consistency and concentration. A comprehensive examination and analysis of the management control literature in healthcare and enabling/coercive formalisation studies was used during the entire course of this study to relate, refine and improve the quality of research findings, and reconsider potential contradictions. This is not unusual in qualitative research and Ahrens and Chapman (2006b) explain that data collection is not a linear process: "Problem, theory and data influence each other throughout the research process. The process is one of iteratively seeking to generate a plausible fit between problem, theory and data" (p. 836).

For example, it became apparent in the first phase of interviews that some of enabling/coercive features of accreditation identified by interviewees related to design and some to use. Previous literature was then re-examined and was found to support the importance of these two phases (Dowling and Leech, 2014). Therefore, in the subsequent phase of interviews, the researcher conducted several interviews

with a number of individuals from the Health Department to better understand how the system was designed and implemented[43].

The final step (*writing the report or presenting the study)* included selected quotations (translated from Catalan or Spanish to English language) from interviewees to exemplify a specific theme and present the 'thick description' (Denzin, 1994, p. 505) in the findings chapters (Chapters 5 and 6). Solid descriptive data was used to provide results in a manner that readers could understand and interpret the information (Patton, 2002). Patton (2002) recommended the incorporation of sufficient quotations and relevant information "to allow the reader to enter into the situation and thoughts of the people represented" (p. 429-430). Where direct quotes were reported, the researcher used a numerical system to identify the organisation, the interview and the interviewee (i.e., 3-13-7 denotes organisation 3 (Hospital S), interview 13 and interviewee 7). The overall purpose of this latter step was to integrate patterns and concepts and provide a coherent story relating back the research questions and the literature (Braun and Clarke, 2006).

4.7 Validity and reliability of the research

This research follows the ethical principles recommended by NUI Galway Research Ethics Committee[44]. The research methods adopted in this study (i.e., interviews, documentation, and observation) were managed following strict ethical protocols to provide veracity and reliability to the findings (Bryman, 2012; Saunders et al., 2012). Following the key ethical research principles described by Easterby-Smith et al. (2008), a number of actions were taken to safeguard the integrity and dignity of participants, protect the privacy and anonymity of participants and organisations, ensure informed consent of participants and data confidentiality, and communicate

[43] A similar point was also raised by Jørgensen and Messner (2009) in their enabling/coercive control study to indicate that the design and implementation are two phases that could be treated separately (Adler and Borys, 1996) or combined together because of the complexity of differentiating them (Wouters and Wilderom, 2008).

[44] The application form consisted of twenty-seven pages examining areas such as researcher's details, study details, recruitment of participants, consent, details of interventions, risks and ethical problems, indemnity, and confidentiality. Special emphasis was placed on addressing issues related to recording data, participant involvement, storing and transmitting data. The researcher had to provide a participant information sheet, consent form and list of interview questions to receive the unconditional approval from the NUI Galway Research Ethics Committee.

findings in a honest and transparent fashion (see Appendix I for a copy of the approval letter from NUIG Ethics Committee).

Although the case study approach is a useful method to examine the research questions described in this chapter, it has to follow a rigorous, systematic and iterative process to meet validity and reliability standards and present an objective and truthful picture of the observed reality (Altheide and Johnson, 1994; Eisenhardt, 1989; Yin, 2009; Cagnon, 2010). Concerns about the rigour and credibility of qualitative research are frequently present in the literature because of the potential subjectivity and bias of researchers and limited 'generalisability' of findings (Miles and Huberman, 1994; Baxter and Chua, 1998; Patton, 2002; Ahrens and Chapman, 2006b; Yin, 2009; Chapman, 2012). Reliability and validity threats such as researcher-induced effects (i.e., relationship building between researcher and participants, researcher asking leading questions), observer bias (i.e., knowledge domain, participant provides the kind of answers you want to hear), limitations to data access and disorderly data analysis are common challenges faced by researchers (Given, 2008; Flick, 2009; Yin, 2009).

While triangulation (by methods, sources and investigators) and structural analytical protocols (e.g., Glaser and Straus, 1967; Miles and Huberman, 1994) are effective strategies to reduce potential threats of bias during the process of data collection, familiarity with research methods (i.e., techniques for interviewing), case study protocols and assurance of confidentiality help to minimise certain researcher biases. This study adopts Miles and Huberman's (1994) protocols to portray a credible, authentic and reliable representation of research based on a systematic collection and analysis of data. The following paragraphs provide a comprehensive analysis of the five 'standards for the quality of conclusions' described by Miles and Huberman (1994, p. 277-280) and adopted in this research: (i) objectivity-confirmability; (ii) reliability-dependability-auditability; (iii) internal validity-credibility-authenticity; (iv) external validity-transferability-fittingness; and (v) utilisation-application-action orientation[45].

[45] This approach is similar to the four criteria of 'construct validity/internal validity/external validity/ reliability' followed by Yin (2009) and the four 'trustworthiness' criteria adopted by Lincoln and Guba (1985) and Guba and Lincoln (1994) based on credibility/transferability/dependability/confirmability.

First, *objectivity-confirmability* refers to neutrality, freedom from unacknowledged bias of the researcher, and considerations related to the unavoidable bias inherent to research. Second, *reliability-dependability-auditability* denotes the consistency and stability of the process over time and across methods and participants. It examines the way in which an independent researcher could reach the same conclusions following similar procedures. Third, the *internal validity-credibility-authenticity* criteria assess the 'truth value' about how research findings make sense and to what extent these findings are credible to the participants investigated, the research community and others. Fourth, external *validity-transferability-fittingness* evaluates the generalisation of findings and conclusions in a broader context taking into consideration the fit of such findings with the actual knowledge. Lastly, *utilisation-application-action orientation* represents the practical value of the research for participants[46].

In this study, *objectivity-confirmability* standards were used to provide evidence that logical interpretations did not offer subjective judgments and information was trustworthy and made sense to others. Tactics included procedures commonly used for enhancing construct validity tests (Yin, 2009). As described earlier, multiple research methods and data sources (i.e., primary and secondary data) were used during a prolonged period of time to gather relevant information. This provided a coherent, convergent and comprehensive account of different perspectives and lines of inquiry for data collection and data analysis. Methods and procedures were described in detail to give chronological evidence on how information was collected, processed, condensed and displayed for discussion and conclusion representations. Written memos based on record of methods, procedures and research progress were adopted to establish a chain of evidence and 'audit trail' (Miles and Huberman, 1994; Atkinson and Shaffir, 1998). The research process also increased researcher's self-awareness about potential effects inherent to personal assumptions, biases, values and affective states. Consideration and reflection in terms of rival and alternative conclusions/ interpretations was useful to enable critical thinking. Peer assistance from supervisors was used to cross check

[46] The researcher recognises the possibility of some overlaps between these five different dimensions.

themes and sub-themes to guarantee objectivity. Data was retained and used based on ethical principles and available for reanalysis by others if needed.

In terms of *reliability-dependability-auditability* criteria, this research followed a consistent and stable approach across methods and processes to minimise errors and research bias. Researcher reflexivity helped to recognise the strengths and limitations of different research paradigms and theoretical choices. The decision and rationale for selecting a particular theory (i.e., enabling/coercive formalisation) and adopting different research methods was discussed during the process. Dependability concerns were addressed by taking into consideration setting changes and how this situation could impact on the research approach adopted. Assurance that data was collected and analysed in a systematic, organised and logical manner was important to articulate and refine research questions. While the case study protocol was useful to standardise collected data, the interview protocol was valuable to describe researcher/participants roles and status. Additionally, it was critical to show that findings presented certain consistency across data based on meaningful constructs clearly identified. Although the researcher did not use advanced qualitative research software like NVivo to manage unstructured data, there was agreement on themes/categories (together with researcher's supervisors) and continuous data quality checks to ensure reliable results. The lists of interview questions and different documentation related to hospitals included in the section of Appendices are examples of strategies that provided guidance and congruence during the process.

Rigour during and after the analysis of themes was achieved by conducting a careful transcription to avoid anecdotal evidence, overlap across themes, and use of the interview guide questions as the 'themes' to be reported. Themes were categorised using a consistent, coherent and reflective approach aplying congruence between extracts, narrative and analytical analyses. A logical approach following the checklist criteria for good thematic analysis provided by Braun and Clarke (2006) was used to guarantee an accurate analysis of themes by transcribing data to an appropriate level of detail; checking transcripts against audio tapes; paying equal attention to items during the process of data analysis of themes; collating relevant extracts; inspecting themes against each other and back to the original set; selecting extracts relevant for analytical claims; completing all the phases without rushing;

and providing a credible story matching data, analytical claims, theory, and research questions.

In addition, *internal validity-credibility-authenticity* was achieved by offering credible information about the organisations described and the individuals interviewed. A key objective was to make sense of findings as well as offer convincing descriptions and plausible arguments to readers. Some of the tactics to achieve internal validity included rich and meaningful contextual descriptions (i.e., overview of the standards included in the new accreditation system), data triangulation across information sources to deliver consistent explanations, presentation of data linked to the theory adopted (i.e., classification of findings based on the four dimensions of repair, internal transparency, global transparency, and flexibility), internal coherence of findings, connections between concepts (i.e., enabling/coercive formalisation and ambivalence), identification of areas dealing with uncertainty (i.e., trade-offs between cost/quality objectives) and pattern matching within and across the two sites investigates (i.e., similarities/differences between Hospital S and Hospital L). Rival explanations were used to as a strategy to interpret data and validate building theory.

External validity-transferability-fittingness measures were also adopted to recognise the possibility that conclusions could be transferred and applied to other contexts. The overall process of verifying and reporting data comprised an assessment of the 'generalisability' (i.e., whether findings can be applied elsewhere) and validity (i.e., whether the study examines what it is intended to be examined) of information based on a number of checks, assessments and interpretations (Kvale, 2008). Although it was evident that qualitative research data was difficult to reproduce in another setting because individuals and processes would not have the same characteristics, it was also certain that there were some mechanisms that could help to adjust, transfer and compare research findings to different jurisdictions and sectors. These include, for instance, awareness that the selected sample incorporated theoretical diversity to promote wider applicability (i.e., top management from medical, nursing, economic, customer services, human resources and information systems departments), the scope and boundaries for acceptable generalisation were described by the researcher (i.e., externally mandated control systems), previous theory was used to accommodate actual

research findings (i.e., systematic literature review on enabling/coercive formalisation), and potential opportunities to replicate the study (i.e., public sector). As mentioned earlier, case studies were not appropriate to offer generalisability and transferability to other populations, but they were helpful to deliver analytic generalisation based on their ability to provide explanations of events with similar theoretical foundations.

Additionally, a critical way of verifying or validating findings was to send back the interview transcripts to respondents to corroborate the accuracy of information. The reporting stage was useful in communicating research findings in an effective, comprehensive and logical manner. Special emphasis was placed on ensuring accepted scientific criteria, ethical considerations (i.e., confidentiality and respect) and readable format for its intended audiences. For example, the findings chapters tried to use illustrative and interesting stories rather than endless quotations to explain relevant issues.

Finally, this study also took into consideration a number of concerns related to *utilisation-application-action orientation* research standards in order to understand the implications for participants, researchers and potential audience. For example, research findings were accessible to potential audiences (i.e., academics, hospital managers) thanks to their dissemination in colloquiums and conferences, encouragement and guidance by readers for future developments (i.e., feedback from a recognised academic to divide findings in design/use features), and increased awareness of ethical concerns of this study (i.e., confidentiality and anonymity of information).

Despite these efforts, the researcher recognises that his mere presence during the research might have resulted in biased responses from participants. Other limitations of the research include reliance on perceptions and experiences of interviewees as an indirect form of verification of events, the risk of becoming extremely dependent on a very small number of key participants, and potential contradictions resulting from the heterogeneity of responses and perceptions of respondents (Lincoln and Guba, 1985; Miles and Huberman, 1994; Yin, 2009; Silverman, 2013).

4.8 Chapter summary

This chapter presented the methodology and research methods used in this study. It outlined the research objectives and research questions addressed in the study based on the principles of the enabling/coercive formalisation theoretical framework (Adler and Borys, 1996). Then, the chapter discussed the rationale for adopting a qualitative and interpretive approach and introduced the case study approach as a suitable instrument to examine performance management systems in two public hospitals in Spain. Data collection methods (i.e., semi-structured interviews, archival data and observations) were presented before discussing the different steps carried out to analyse and interpret information. Finally, the chapter summarised actions taken to increase the reliability and validity of the findings.

CHAPTER 5: BACKGROUND CONTEXT AND INTRODUCTORY FINDINGS

5.1 Introduction

The aim of this chapter is to address the first research question: *What is the role of the accreditation system?* It starts with a description of the healthcare system in the Spanish region of Catalonia and introduces the tensions faced by hospitals in managing cost and quality objectives. Next, the chapter provides insights on the main features of the current acute care hospital accreditation system and shows how the system was created for quality assurance but has morphed into a continuous quality improvement system. Then, it examines the importance of accreditation in managing cost reduction and quality improvement.

The chapter reports findings based on participants' interviews, examination of relevant documents (i.e., accreditation manual, Excel self-assessment accreditation tool) and some non-participant observations. The approach used to describe findings is to present data on Hospital S and Hospital L in an aggregated manner. Although the analysis of the two hospitals has been carried out separately, the chapter integrates findings from both hospitals as few differences were found between the hospitals.

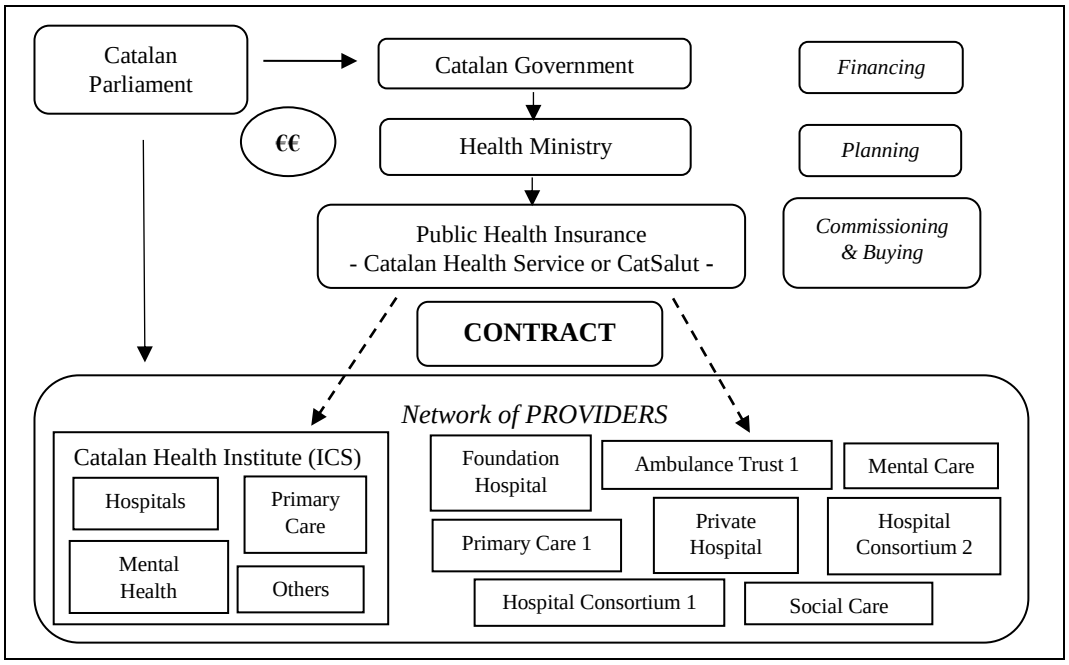
5.2 The healthcare system in the Spanish region of Catalonia

The Spanish healthcare system is tax-based and integrates a variety of services combining aspects of public and private care (Acerete et al., 2011). It is based on a decentralised model where the provision of services is independently managed by each of the seventeen different regions or "autonomous communities" (López-Casasnovas et al., 2005; Álvarez and Durán, 2013). The Central Government holds authority over specific healthcare areas including basic legislation and coordination, financing, minimum funding package, educational healthcare requirements, and pharmaceutical and international health policies. In contrast, each region (for example Catalonia) holds supplementary legislation and is responsible for its own organisational health system structures, purchasing and

provision of services, planning, and accreditation through different agencies (Sánchez-Martínez et al., 2006). Typically, the structure of regional healthcare systems comprises a ministry in charge of regulation, planning and policy activities as well as a regional healthcare body acting as a provider of health services (García-Armesto et al., 2010).

The region of Catalonia has a decentralised healthcare system which covers a population of 7.5 million and is based on the universal principles of equity and 'free of charge' at point of delivery. The Catalan Government, also known as 'Generalitat de Catalunya', has developed its own model based on the historical evolution of its own healthcare system. Approximately thirty per cent of the resources in the public network were owned by the government (through a body known as the Catalan Institute of Health[47] or ICS) while the rest were owned by other institutions such as foundations, trusts or non-profit private organisations. The system uses a three-level model based on the following functions: (i) funding, objectives, and resources; (ii) insurance/purchasing of services; and (iii) provision of services. See below an overview of the Catalan healthcare system.

Figure 5.1 Health system in Catalonia



[47] The Catalan Institute of Health (ICS) is the main public provider of health services comprising 8 public hospitals and 470 primary care units. The hospitals provide 32% of available beds at the Catalan Public Hospital Network (XHUP) and three of these hospitals (out of the total of five in Catalonia) are considered as high technology hospitals. More than 38,000 professionals (20,000 in primary care units and 18,000 in hospitals) work at the ICS (Catalan Institute of Health, 2014).

The first level refers to the funding, design of objectives and allocation of resources. Its key players are the 'Parliament', which designs and assigns budgets, and the 'Department of Health', which details the Health Plan and transfers economic resources through different programmes. The second level is concerned with the purchases of services and its key player is the public insurer known as 'Catalan Health Service'[48] or CatSalut, which guarantees healthcare coverage to the network of providers. Finally, the third level is related to the provision of services through the 'network of providers' in charge of delivering free healthcare to the citizens[49]. Therefore, in the case of Catalonia, similar to the experiences in other countries such as the United Kingdom, the model creates a complete 'purchaser-provider' separation based on coordinated contracts and agreements between 'purchasers' (i.e., Catalan Health Service) and 'providers' (i.e., hospitals, primary care centres, ambulance trusts).

5.3 Hospital objectives: management of cost and quality

Consistent with previous literature (Abernethy et al., 2007; Eldenburg and Krishnan, 2007; Cardinaels and Soderstrom, 2013), the complexity of managing the multiple objectives and stakeholders in the healthcare environment was pointed out by interviewees. Hospitals frequently faced situations which required managing 'external' objectives set by governments or other external stakeholders as well as 'internal' objectives and targets designed at hospital level:

> "There are a number of institutional objectives in accordance with the vision and mission of the hospital and its strategic approach, but there are also a number of operational objectives which are modified according to our main client (the Catalan Health Service), who impose them on us"
>
> Hospital Director, Hospital S (3-1-1)

[48] The Catalan Health Service or CatSalut (Servei Català de la Salut (SCS) in Catalan) is a government body that operates as a public insurer, recognises health requirements and needs, purchases services into an internal market to public and private providers (i.e., hospitals) and evaluates healthcare issues (Gené-Badia et al., 2008).

[49] Current percentages of services are distributed as follows: the Catalan Institute of Health (20%), contracted providers (70%) and private centres (10%).

As mentioned before, a key objective for both hospitals was to secure a 'contract' with the main public insurer and purchaser of healthcare services, previously referred to as the Catalan Health Service or CatSalut. This contract was negotiated on a yearly basis and included long-term objectives based on the regional health plans and also short-term and medium-term objectives based on the completion of certain levels of activity (i.e., medical discharges, surgical activity, outpatient activity), agreed procedures[50], waiting lists compliance to such procedures, and various indicators related to different financial and non-financial quality targets. The economic output expected and the pricing/invoicing mechanisms used to evaluate health care activity were also included in this contract. This focus on contracts is aligned with a key aspect of the NPM philosophy which emphasises the use of contractual agreements (see footnote 5 in Chapter 2).

In relation to Hospital L, the Medical Director (1-6-6) referred to three key areas in their contract: (i) sustainability; (ii) quality, safety and care activities; and (iii) organisational improvement. *Sustainability'* objectives (65% of the total) were related to the viability of the hospital and the balance between revenues and control of expenditures. *'Quality, safety and care activities'* objectives (30% of the total) were based on quality and safety patient indicators evaluating surgical productivity, chronic hospitalisations, care of outside area patients, and some pharmaceutical and prescription measures. *Organisational improvement'* objectives (5% of the total) comprised two actions that represented changes in the organisational structure and surgical processes of hospitals to improve quality and efficiency such as the reduction of postoperative sepsis and the achievement of the acute care hospital accreditation. Hence, management of both cost and quality was important to meet these objectives. However, given the high weighting of the sustainability objective, cost was viewed as dominant by many interviewees.

> "The annual objectives of the hospital are designed by the main provider of the healthcare services in Catalonia, i.e., a package of indicators and targets, and in recent years the most important aspect has been *sustainability*, which means achieving numbers in an economic sense. Sustainability means producing results (based on our predetermined budget) without deficits. This economic facet is the most

[50] The current system is focused on fourteen agreed procedures or surgical interventions which include: cataracts, varicose veins, hernias, cholecystectomy, arthroscopy, prostatectomy, carpal tunnel release, tonsillectomy, circumcision, hip prosthesis, knee prosthesis, hysterectomy, hallux valgus or bunions, and pilonidal sinus.

> important issue and then we have another area focused on *quality and healthcare delivery* (...) and then some small things related to *organisational improvement* or modernisation (...) Due to current restrictions, now we have to deliver services with minimum resources"
>
> Information Systems Director, Hospital L (1-3-3)

This view was consistent across both hospitals and expressions such as "we must be financially solvent" (Technical Services Director, Hospital S, 3-5-5) or "economic viability" and "saving policies" (Customer Services Director, Hospital S, 13-6-6) were used by interviewees to stress the growing importance of economic objectives and the need to secure new funding sources (i.e., private insurance funds).

The dominance of cost objectives was explained in the context of the pressure to secure a contract and current financial constraints due to austerity policies. The importance of quality was also acknowledged within the parameters set by the cost constraints. The Medical Director of Hospital L (1-6-6) recognised that the main goal was to provide healthcare services within their assigned territorial area with "the best quality, in the most efficient way, and in a sustainable manner", although he indicated that since 2011 the percentage of quality objectives in comparison to economic objectives decreased significantly. The only quality-oriented objectives included in their contract were a reduced number of indicators dealing with clinical safety, drug-related detection errors or the promotion of electronic prescriptions, which were considered as:

> "part of a small box with little weight in the overall management structure because the most important issue is budgetary compliance, new customers [new funding sources], etc., which is obviously the economic element and, as a result, the focus on quality of care has diminished"
>
> Medical Director, Hospital L (1-6-6)

This prominence of economic objectives was also noted by the Medical Director of Hospital S (3-2-2) who pointed to the change in perception of healthcare professionals in recent times towards the achievement of objectives included in their hospitals' contracts:

> "To date we used to look at hospital issues from an equidistant social and care viewpoint, but nowadays the economic viewpoint has acquired a growing importance and magnitude because hospital functioning is based on contracts, which are getting more and more restrictive and as a result the economic facet becomes more relevant"
>
> Medical Director, Hospital S (3-2-2)

While economic targets were prominent, interviewees also referred to the importance of quality and particularly the use of non-financial indicators given the greater difficulty of measuring quality than cost.

> "In the past, for instance, if a department manager selected a prosthesis costing 'x', the most important thing was if he liked it, was easy to place, etc. Nowadays, we always analyse other options such as economic differences (...) The goal remains the same, which is healthcare delivery, but now we take into account economic issues that before were not too relevant, but always looking at the quality-price relationship and complying with the healthcare requirements"
>
> Economic & General Services Director, Hospital S (3-7-7)

The challenge of managing both cost and quality objectives in a context of increasing demand but restricted capacity was voiced by many interviewees and is summed up in the following quote from the Medical Director of Hospital S:

> "So far this hospital had, let's say, a contract for 2,000 surgeries. They have asked us [the public purchasing body] to lower this number by a certain percentage. If we have a growing aged population, it means that there is more demand for surgeries, but we are contracted to perform fewer operations... how are we going to solve this situation? (...) The concern is whether this situation will just continue for a few years or it will go beyond 2016, for example. How are we going to tell our community that we will continue doing the same but with fewer resources?"
>
> Medical Director, Hospital S (3-2-2)

The relationship between cost and quality was found to be a complex one and the next sub-section presents evidence on a range of different views of interviewees on the interaction between cost and quality objectives.

5.3.1 Interaction between cost and quality

Analysis of findings revealed that the relationship between cost and quality was complex and could take a number of different forms such as increases in both cost

and quality, decreases in both cost and quality, increase in quality with no impact/decrease in cost and a non-linear relationship between cost and quality where costs initially increase but then decrease.

There was an overall view that hospitals frequently invested resources (i.e., higher costs) to achieve higher levels of quality. This viewpoint was supported by the Technical Services Director of Hospital S (3-15-5) when she referred to the effects of quality improvement on cost containment:

> "We have many examples where in order to deliver the required quality standards we need to increase our resources or something else that ends up increasing costs"
>
> Technical Services Director, Hospital S (3-15-5)

The best scenario was portrayed as one where lower costs led to the same or higher quality levels. A challenge faced by healthcare organisations in Catalonia during the past years was to produce more activity with fewer costs while maintaining at least the same level of quality and achieving this relationship between cost and quality was the goal.

In Hospital S, the Human Resources Director (3-4-4) identified that a main concern was "to maintain the viability of the hospital by means of cost containment while maintaining the quality of services", despite the fact that the hospital had been extremely affected by "reductions of tariffs and activity". The Nursing Director (3-3-3) commented that pursuing the two objectives was not impossible, particularly when a longer term approach was taken. While increased cost was generally difficult to justify, she provided an example encountered by the nursing department around seven or eight years ago where an increase in costs was sanctioned to reduce the number of pressure ulcers and this led to higher quality and lower costs in the long term:

> "If we did not spend money to prevent them [ulcers], then it will be much more expensive in the future in terms of patients and employees, because they [employees] will spend more hours next to the patients to cure them. We need to interrelate both [cost and quality] because it makes no sense having now lots of savings, but in the future it will be more expensive. If you do not invest in safety issues, in the end, it will mean an increase in costs".
>
> Nursing Director, Hospital S (3-3-3)

This immediate increase in cost was sanctioned due to the potential for longer term savings. She also confirmed that indicators such as the rate of 'absenteeism' were used to evaluate cost and quality because it helped to understand the costs of nurse shortages and its impact on quality of care, safety of patients and potential increases in average length of stay. Absenteeism was viewed as an indicator which reflected increasing overtime needs. It was a significant cost for the hospital as agency costs had to be incurred to replace absent or sick employees. It could have indirect effects in terms of poor quality from overtime fatigue or understaffing resulting in higher risks of patients having complications, and reduced productivity. The Human Resources Director (3-4-4) recognised that managing absenteeism was not an easy task and pointed to the focus of recent cutback policies to control expenses linked to personnel budgets:

> "We [Human Resources] need to guarantee cost containment because we are a service organisation where personnel expenditures represent almost 70% of the total hospital expenditures, but we also need to adjust personnel capacity to the needs of the hospital. Therefore, we need to have a flexible structure adapted to the hospital's needs where employees feel that they work in a good environment, they believe in our projects and they are motivated doing their jobs"
>
> Human Resources Director, Hospital S (3-4-4)

The Human Resources Director indicated that managing absenteeism without affecting the quality of services provided was difficult and they did not have enough evidence to conclude that their actions were successful. Additionally, she emphasised that performance management using economic measures was still at an early stage in the healthcare industry and portrayed hospitals as organisations "not used to measuring performance, primarily because of the cultural belief that 'care' is the first priority". This reflected unease with the potential for economic indicators to result in reduced quality of care.

Similarly, a difficulty for Hospital L has been the decrease in financial resources due to recent budget reductions. The Medical Director (1-6-6) used the term 'opportunity costs' to denote the loss of a certain number of clinical services performed in the past. This reduction was not within the control of the hospitals and served to limit the perceived benefits of greater efficiency as increased throughput of patients was not permitted within the terms of the contract:

> "The problem with the cutbacks is 'what' [the surgeries / operations] you don't do anymore, not what you actually do. Whatever we do now is performed exactly the same as before, and with the same quality (…) The real problem is all we cannot do anymore because we have less budget and less structures (…) What really worries me is all the patients we cannot treat, all the hip replacements that we cannot perform, all the spine surgeries we performed in the past and so on"[51]
>
> Medical Director, Hospital L (1-6-6)

The Medical Director's comments revealed concerns about the motivation to reduce costs when efficiency did not translate into increased activity, just lower budgets, and the public did not perceive any immediate benefit. It also reflected a view that lower costs in this case did not necessarily translate into lower quality as quality standards were perceived to remain very similar.

Hospital L has suffered a significant decline in bed capacity during the past six years from 800 beds in 2009 to 610 beds in 2014[52]. The Human Resources Assistant Director (1-1-1) recognised that some of the main priorities in the hospital were directed at reducing the patient length of stay and the number of beds while maintaining the same level of activity. However, he affirmed that people normally perceived that "a decrease in the number of beds meant a reduction of our capacity to perform", which in turn translated into reduced care delivery. A key goal was therefore to reduce the number of hospitalisations, which would translate into reduced needs for healthcare staff. In order to minimise staffing requirements, they followed two different approaches (hospital at home and ambulatory surgery) to address the need for cost reductions and quality enhancement:

> "first, promoting 'hospital at home', which means less resources (less beds and staff treating patients) because there are many diseases and illnesses that do not require hospitalisations; and second, promoting 'ambulatory surgery' [also known as day surgery or outpatient surgery] because this reduces patient length of stay at the hospital"
>
> Human Resources Assistant Director, Hospital L (1-1-1)

[51] See Appendices B and C for detailed information. There is a trend in the past years showing similar levels of activity (i.e., major surgeries, discharges, and external visits) within a context of reductions in terms of budgets and beds capacity. The researcher recognises that some indicators such as bed days, average length of stay, day cases, readmissions, and visits to emergency rooms could provide valuable insights on this issue. However, information related to such indicators proved to be inconsistent and fragmented due to changes in the mechanisms and methods to calculate such indicators.

[52] See Appendix C for detailed information.

A group interview with two nurses and the Head of Quality & Safety of the Nursing department noted the benefits of 'the stay at home' approach and increased the researcher's awareness that hospitals were a continuous location of infections and not always the best place for patients to stay. They provided an example of a cost-free practice such as 'hands sanitation' or 'hand hygiene' that could reduce costs and improve quality if healthcare professionals followed the required protocols and guidelines before and after contact with each patient. A high percentage of infections in the hospital were caused by "nosocomial infections" or hospital acquired-infections, which were transmitted from one patient to another because healthcare professionals did not wash their hands. A simple and inexpensive measure such as not washing your hands "could cost money because if the patient gets an infection, then you will have to use broad-spectrum antibiotics which are much more expensive" (Nursing Head of Quality & Safety, 1-4-4). Thus, a focus on prevention through hand sanitation was viewed as a mechanism to manage both cost and quality where a very limited increase in costs led to significant quality improvement.

Overall, the interaction between cost and quality was viewed as a complex one. Interviewees pointed to different ways of managing quality and cost and recognised that the two objectives were not mutually exclusive. The General Director of Hospital S (3-19-1) summarised the relationship between cost and quality as two objectives that "work in tandem, not in opposite directions".

Additionally, an important compulsory prerequisite to be part of the network of providers[53] and also secure a contract with CatSalut was the fact that hospitals had to be *'accredited'*. Acute care hospitals aiming to be part of this network had to comply with current legislation and adapt their structures and processes to the accomplishment of predetermined results set by the healthcare government agency. Hospitals willing to guarantee a contract with the main public insurer of health services (CatSalut) had also to be accredited to demonstrate their capacity to achieve a minimum level of quality standards. As a result, the acute care hospital accreditation was seen by interviewees as the key instrument to become an authorised centre and "contract health services" (Hospital Director, Hospital S, 3-

[53] This network of hospitals is known as the Integrated Public Health System of Catalonia (SISCAT in Catalan).

19-1). Paradoxically, a quality-oriented system like the hospital accreditation was also used by the government as an obligatory mechanism to manage many economic and cost objectives. Further attention to the previous views expressed by participants revealed that hospital accreditation was behind many efficiency concerns to improve quality and reduce costs simultaneously.

The next section presents the main features of the current hospital accreditation system to understand its metamorphosis from quality assurance to continuous quality improvement and also its role in managing quality and cost objectives.

5.4 Features of the acute care hospital accreditation system in Catalonia

This section introduces the hospital accreditation 'old model' (pre 2006) and 'new model' (post 2006) based on a descriptive and historical account of its main characteristics and also several interviews with key members of the Health Department accreditation team.

The old model: Acute care hospital accreditation before 2006

From a historical perspective (see Table 5.1 in the next page for an overall picture), after the transfer of healthcare responsibilities from Spain to Catalonia in 1979, the Catalan Department of Health & Social Services introduced in 1981 an external quality accreditation system for acute care hospitals (Healy, 2011). This pioneering experience standardising the provision of healthcare quality became the first accreditation model established in Spain and also in Europe to examine the physical and organisational structures of public and private hospitals (Heaton, 2000; WHO, 2003; Fortes et al., 2011). This process helped the Catalan government to attain a comprehensive picture of the basic aspects of the hospital sector and develop the foundations for future accreditation models. The creation of the public hospital network and the second accreditation process in 1983 led to the introduction of a number of new features to enhance prior quality standards. Since then, the accreditation has been related to the accomplishment of certain number of quality standards in order to ensure a contract of healthcare services.

In 1990, the Health Organisation Act of Catalonia (known as LOSC) put forward the separation of functions between financing and provision of services, and created the institutional figure of the 'Catalan Health Service' as an intermediary body to regulate and manage the relationships between the Healthcare Administration or Ministry and the network of healthcare providers (Brosa and Agustí, 2009). The third process of accreditation in 1991 followed the prevalent philosophy of accreditation models during the early nineties worldwide to create a more comprehensive approach based on new standards and strategic objectives adapted to the particularities of the Catalan health context. This new viewpoint comprised aspects related to the structural, operational, and organisational standards, and to a very limited extent 'processes' and 'results' of the organisations (López-Viñas et al., 2014). After various accreditation processes during the 1990s and 2000s, the system was renewed in 2006 to the latest quality management developments. This new vision incorporated a conceptual model focused on the encouragement of continuous improvement practices and higher participation of management and healthcare professionals in the examination and measurement of the required standards (López-Viñas et al., 2014).

Table 5.1 Historical approach to the Catalan accreditation (Catalan Health Department, 2014)

Timeline 1979-2013
1979: Transfer of healthcare competences to Catalonia
1981: First accreditation process for acute care hospitals in Catalonia (21 November 1981 Order)
1983: Second accreditation process for acute care hospitals in Catalonia (25 April 1983 Order)
1988: Creation of the Advisory Commission for the accreditation of acute care hospitals (16 August 1988 Order)
1991: Third accreditation process for acute care hospitals in Catalonia (10 July 1991 Order)
1992: Amendment of the 16 August 1988 Order, adapting the composition of the Advisory Committee for the accreditation of acute care hospitals
2000: Creation of the Quality Assistance Advisory Council of the Health Care Department
2005: Presentation of the new Catalonian accreditation model for acute care hospitals
2006: Start of the new accreditation model, regulated by Decree 5/2006 of 17 January
2006: Celebration of 25 years of Catalonian accreditation
2009: Ceremony of hospital accreditation certificates
2013: Start of the second accreditation period (2013-2016) for acute hospital care centres

The new model: Acute care hospital accreditation after 2006

In January 2006, the Catalan government approved a new accreditation model adapted to the latest quality management practices to improve processes and achieve better results. This system was based on prior experience gained through twenty five years since Catalonia implemented its first accreditation model. The ultimate goal was to replace the former obsolete model and build a new system where organisations could enhance performance according to the principles of the 'culture of excellence' (see Table 5.2 below for a comparison between the 'old' and 'new' systems).

Table 5.2 Main differences pre & post 2006 accreditation (Catalan Health Department, 2014)

Previous accreditation model (before 2006)	Actual accreditation model (after 2006)
- Compliance with predetermined standards	- Promotes improvement based on the gradual achievement of standards
- Obsolete model	- Innovative model
- Compliance with regulation	- Commitment and leadership at management level
- Limited participation	- Organisational staff involvement
- Does not require culture of quality	- Direct impact on the entire organisation based on the culture of quality
- Based on the structure and management of the health centres	- Evaluation of processes and results-focused
- Does not promote professional skills & judgment	- Promotes organisational knowledge management
- Does not take into account the environment	- Promotes higher compromise with the environment and society
- No cooperation with external agents	- Takes into account organisational partnerships & relationships
- Focus on weaknesses	- Generates strengths & weaknesses and promotes continuous improvement
- Recognises the internal culture of the health centres	- Recognises the organisational culture as a vehicle for improvement
- Audits are conducted by specialists from the Department of Health	- Audits are performed by authorised organisations independent from the Ministry of Health
- Independent processes	- Promotes management processes related to the effectiveness and efficiency of the organisations
- Limited orientation to client	- Focused on internal & external clients. Quality is seen as a citizens' right

The emphasis of this new model was not only focused on patient-related measures but also professional and societal indicators. Healthcare providers willing to secure a 'contract' of services with the public insurer and purchaser (Catalan Health

Service or CatSalut) had to be accredited in order to comply with the mandatory quality requirements.

The actual scheme follows a four-stage process including self-assessment, external assessment by a qualified auditing firm, commitment to quality through the implementation of an improvement plan, and certificate attainment. This innovative project was developed by the Catalan Health Ministry and was highly influenced by existing accreditation and certification practices, particularly the European Foundation Quality Management (EFQM)[54] model, but it also combined standards from the Joint Commission International (JCI) and the International Organization for Standardization (ISO). Besides, an analysis of previous experiences implementing healthcare accreditations in some hospitals and a comprehensive review examining the experiences with accreditation in Canada, France and the U.K. was used to conceive the current Catalan model. An active collaboration with some recognised Catalan and Spanish institutions in the quality management domain helped to gain unconditional recognition (López-Viñas et al., 2014).

A number of national and international guidelines and regulatory principles were used by the Catalan Health Ministry to promote a system based on independence, objectivity and confidentiality. The development and creation of the accreditation model, the standards' manual, and the Excel self-assessment tool were developed with the assistance of several institutions including the regulator of health services (Health Department), the purchaser or insurer body (Catalan Health Service) and a small number of healthcare providers (hospitals). A pilot test comprising ten hospitals was used to evaluate some issues related to the suitability and optimisation of the proposed application. The key features of the 2006 model emphasised the role played by citizens and healthcare organisational members and the focus on having well-developed processes and improved results bearing in mind the contextual factors of the system, the possibility to be applied to the different health services, and the sustainability of the healthcare system (López-Viñas et al., 2014). Following the experience of this initial process focused on acute care hospitals, the

[54] The EFQM is a Total Quality Management approach created in 1988 by the presidents of 14 major companies in Europe. It provides a graphical framework which is used to conduct self-assessment as well as external evaluations. It is inspired by the Malcolm Baldrige award in the U.S. and follows the Donabedian principles of structure, processes and outcomes stressing the importance of organisational development (Heaton, 2000). At present more than 30,000 organisations in Europe use the EFQM model (EFQM, 2014).

accreditation process has also been customised to the specific features of other healthcare services including primary care, mental health, and social care activities (De la Puente-Martorell and Gomàriz-Parra, 2010).

One of the main priorities of the Health Department during the implementation process in 2006 was the design of a 'communication plan' directed to the healthcare providers to explain the most significant changes, key objectives and methodology of the current accreditation model. This information was provided to all the major actors involved in the process such as the hospitals to be accredited, different associations of hospitals, insurance companies, quality charitable trusts, some accreditation bodies and professionals employed at the Health Department. An open access website which contained all the required documents and practical information was created to facilitate full understanding of the process. Furthermore, a 'training plan' was designed to help hospitals and auditing firms during the entire process, particularly in terms of guidance to assist hospitals to perform self-assessments as well as specific training for the auditing firms to ensure proper application of the model. A rigorous technical training program was followed to guarantee that surveyors were capable of conducting uniform and standardised external audits. Feedback from a number of hospitals which embarked on pilot experiences was fundamental to understand early complications and minimise potential misinterpretations.

In addition, the role played by the auditing firms was seen as a critical feature of the existing process. The accreditation consisted of an initial self-assessment stage followed by an external audit and an analytical review conducted by an expert commission, which delivered an evaluation report. Audits had to be carried out by authorised external organisations completely unrelated to the Catalan Administration in order to guarantee independence and confidentiality. The hospitals being examined had absolute freedom to decide which auditing firm would conduct their accreditation assessment. The external examination was seen as the crucial point of the whole process since it provided a comprehensive and systematic analysis of the quality standards. After completing the external evaluation, the auditing firm sent the 'technical evaluation report' to the audited hospital, which gave hospitals the opportunity to contest the auditor's outcome and conclusions. Afterwards, the auditing firm issued the 'final audit report' to the

Health Department, which was evaluated by the Accreditation Committee in order to decide its acceptance or rejection.

The Catalan hospital accreditation was based on the EFQM philosophy where standards described how different 'structures' (i.e., personnel, equipment), 'processes' (i.e., medical protocols, clinical flows), and 'results (i.e., outcomes related to mortality or readmissions) were used to assess the activities and processes carried out in the different departments of the hospitals. These standards were divided into two categories: 'essential' and 'non-essential'. The 'essential' standards were mandatory requirements to be an accredited hospital whereas the 'non-essential' standards were voluntary and involved continuous improvement actions. Some of the non-essentials standards were frequently incorporated as essential standards in upcoming re-accreditations and represented a self-assessment incentive to engage in improving quality management practices.

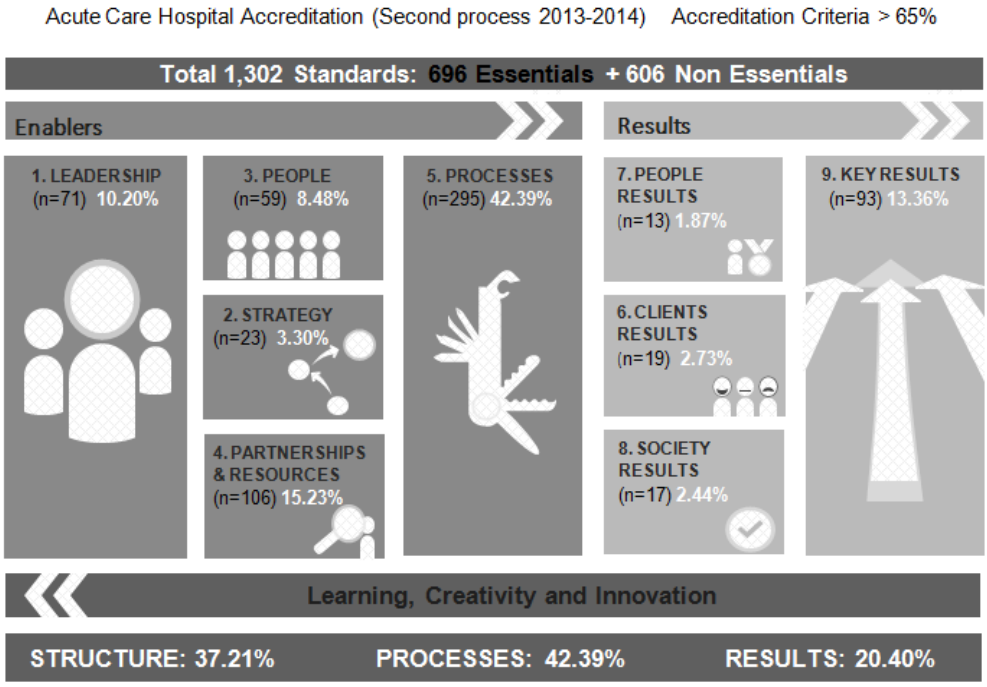
The actual model includes 1,302 standards (696 essentials[55] and 606 non-essentials) and hospitals are only evaluated on the essential standards, which are classified under the following nine dimensions: (i) Leadership, (ii) Strategy, (iii) People, (iv) Partnerships & Resources, (v) Processes, (vi) Client results, (vii) People Results, (viii) Society Results, and (ix) Key Results. Each of the essential standards has a value of 1 point and all are equally weighted within the system. See Figure 5.2 in the following page for an overview of the accreditation system which includes the number of standards for each dimension and their percentage or weight over the total essential standards of the system. In addition, Appendix J summarises the essential standards included in each of the nine dimensions.

The model's nine dimensions are also classified into two groups, namely 'enablers' and 'results'. 'Enablers', which comprise dimensions (i) to (v), represent the standards that the organisation has a level of control over and can change, such as strategy, alliances, leadership, and processes. In contrast, 'results', which include dimensions (vi) to (iv), refer to the outcomes that organisations can measure such as clients' satisfaction and economic results. The final element is a feedback loop labelled 'Learning, Creativity and Innovation', which symbolises the dynamic relationship between enablers and results. The model aims to assist organisations

[55] The first accreditation model in 2006 included 531 essential standards.

to trace back problems arising from the measurement of results. Each dimension contains individual standards that provide compliance guidelines. Although this model provides a comprehensive organisational picture, emphasis is primarily focused on 'Processes' (42.39% of the total standards) and secondly on 'Partnership & Resources' (15.23% of the total standards) and 'Key results' (13.36% of the total standards). Therefore, these three dimensions out of the total nine dimensions represent the 70% of the total standards.

Figure 5.2 Acute care hospital accreditation in Catalonia



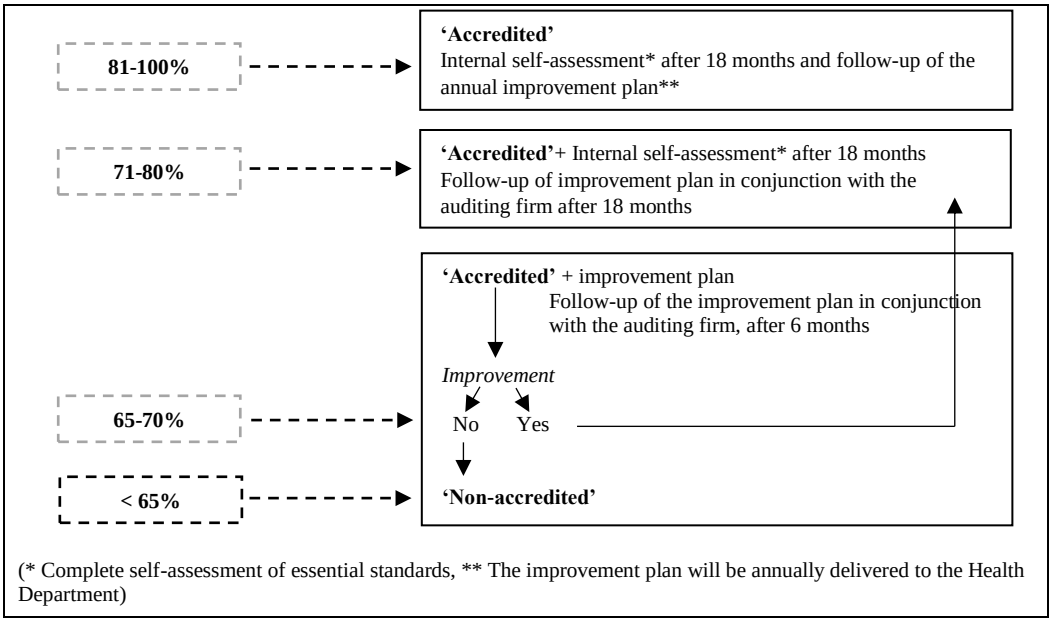
During the 2006-2007 process, a total number of 83 hospitals were examined by five different auditing firms. This included all the 71 hospitals from the public hospital network and also 12 private hospitals. All these hospitals were fully accredited for a period of three years[56] achieving an average compliance percentage to required standards of 82.6 % being 60% of the required score to pass the accreditation process (López-Viñas et al., 2014). In the second process of accreditation in 2013-2014 a total number of 77 hospitals (68 public and 9 private) went through the process of "re-accreditation" and hospitals were audited by one of the three available independent auditing firms. Accreditation has been awarded

[56] The delay in more than three years to evaluate the second accreditation process (2013-2014) came after two postponements made by the Catalan Health Ministry.

again for a period of three years and hospitals had to achieve at least 65% of the total standards to be qualified. The last interview of the researcher with the accreditation team of the Health Department in January 2015 revealed that hospitals achieved an average score rate of 93.47%, which represented a significant increase of almost 11% on the overall performance of the hospitals compared to the first process in 2006-2007. Furthermore, they commented that none of the hospitals examined during the two processes failed to pass the required standards by the Health Department.

Additionally, the system entails an annual review process over the years of validity of the accreditation's certificate. In each of the yearly reviews or monitoring processes, the accredited hospital should inform the Health Department about the standards already attained and those not yet accomplished. The total percentage of 'essential' standards achieved at the audit examination provides the basis for successive annual reviews to determine whether or not the intervention of the auditing firms is needed. See Figure 5.3 below for a better understanding of the essential standards percentages to achieve the accreditation award for 2013-2016.

Figure 5.3 Essential standards percentages to achieve accreditation (Period 2013-2016)



Source: Catalan Health Department (2014)

If the percentage lies between 65% and 70%, the audit firm must perform an external assessment after six months of the certification award. If the hospital passes this external audit then it must follow the steps included in the 71-80% range. In the 71-80% compliance range, the accredited hospital is obliged to undertake an internal self-assessment of the total essential standards every eighteen months as well as an external audit of the improvement plan every eighteen months. Over the 81% compliance rate, the hospital itself carries out its own self-assessment of the total essential standards following an internal review every eighteen months as well as the improvement plan every eighteen months. Therefore, hospitals have an incentive to score more than 81% in order to perform their own assessment and improvement plans without any interference from the auditing firm and the Health Department.

5.5 Role of the accreditation system

Based on the previous sections of this chapter, the accreditation system in Catalonia played two critical roles in the contemporary functioning of the healthcare system. On the one hand, the accreditation was portrayed as a 'driver for change' instrument helpful to promote a move from quality assurance to quality improvement. On the other hand, the accreditation aimed to enhance efficiency by means of managing cost and quality objectives. These two roles of the accreditation are presented in the next sub-sections.

5.5.1 Driver for change: from quality assurance to quality improvement

The 'driver for change' role referred primarily to the move from quality assurance to quality improvement. The first accreditation process during 2007-2008 was useful to create, organise and revise protocols and processes to guarantee compliance with quality standards. The Customer Services Director of Hospital S (3-12-6) recalled how difficult it was to evaluate standards because they "started from scratch". There was also a collective perception that the second accreditation process in 2013-2104 became more demanding. Whereas the first accreditation process was portrayed as "too generic" (Economic & General Services Director of Hospital S, 3-13-7) but useful to create and organise clinical protocols and

processes, the second process was viewed as a "process of continuous improvement" (Human Resources Director of Hospital S, 3-11-4). The use of the self-assessment tool and the feedback provided by the surveyors and the Health Department were positively perceived by interviewees as a 'driver for change'. The revision of numerous medical standards and clinical pathways introduced significant changes targeted at improving the performance of both hospitals in terms of better organisation of information. Many positive and practical changes experienced between the two accreditation cycles were perceived to be due to the systematic and also comprehensive approach facilitated by the accreditation process and its focus on organisational learning and continuous improvement. For example, the Human Resources Director of Hospital S in reference to performance management indicators commented that:

> "We have exceeded that first step of standardising processes and it is now time for learning how to measure in order to improve… it [the accreditation] is now questioning whether or not you have certain procedures and how these are measured"
>
> Human Resources Director, Hospital S (3-11-4)

Interestingly, the Nursing Directors of the two hospitals used the analogy of the SWOT analysis (strengths-weaknesses-opportunities-threats) to stress the value of accreditation "to recognise your weaknesses and your strengths more easily" (Nursing Director Hospital S, 3-14-3) and "analyse our limitations, our errors, our needs, and also our advantages" (Nursing Director Hospital L, 1-16-5) to achieve a better understanding of the activities carried out in the nursing department. For instance, the creation of Excel tables and other documents to analyse results related to the rate of patient falls required for the accreditation was seen as a flagging mechanism to indicate that Hospital S had weaknesses and difficulties in this specific area.

Similarly, the Economic & General Services Director of Hospital S (3-13-7) revealed that "creating excels and checklists" during the accreditation process assisted them to better understand the activities carried out in the accounting and finance department. While previously similar activities were carried out in a "visual manner", the Economic & General Services Director believed that the accreditation system led to greater reflection on processes by "writing things down using

protocols, following certain structures, and revising things every month or two months". A close examination of the essential standards included in the accreditation manual revealed a large number of standards examining plans and procedures which contained continuous improvement features consistent with these views (refer Table 5.3 for examples).

Table 5.3 Continuous improvement features related to plans and procedures (extract Standards' Manual 2013)

Leadership (Group 1) The patient quality and safety plan is objectively reviewed and updated with the schedule periodicity and it is amended, in accordance with the evolution of the environment, its effectiveness or new priorities (1b-05-R-02-E)
People (Group 3) The organisation periodically reviews and updates the procedures in accordance with its criteria for: people management (3a-02-R-01-E), selection process (3a-03-R-01-E), training plan (3b-02-R-04-E), assessment of attitudes and skills (3b-03-R-01-E), etc.
Processes (Group 5) The procedures are periodically reviewed and updated in accordance with the organisation's criteria for: outpatient care (5d-01-R-05-E), emergency care (5d-02-R-01-E), hospitalisation care (5d-03-R-03-E), surgical care (5d-04-R-05-E), laboratories (5d-05-R-03-E), etc.

This move from 'quality assurance' to 'quality improvement' was consistent with previous studies on quality management (Adler et al., 2003) and healthcare accreditation (Pomey et al., 2004). It was also consistent with a recent study by Greenfield et al. (2016) who portrayed contemporary accreditation systems as 'hybrid' models that promote conformance to a minimum set of standards and continuous quality practices through the evaluation of structures, processes, and outcomes of care.

The 'changing' role of the accreditation also resulted from the accumulated experience attributable to the first process in 2007-2008 and was noticeable at different organisational levels. Interviewees indicated that some major changes between the accreditation processes in 2007-2008 and 2013-2014 were caused by the growing importance of standards related to digitalised information, higher collaboration amongst hospitals, and higher involvement of top management and higher delegation to lower levels.

A higher focus on digitalised processes was noted, for example, on topics associated with computerised medical records, electronic prescribing and digital radiology. The revision of standards caused awareness that certain processes and clinical pathways had become "obsolete" (Quality Coordinator, Hospital S, 3-9-9). While in past accreditation audits, surveyors focused on inspecting written documentation and medical records in paper format, information now became "virtual" and "digital" as accreditation standards in 2013-2104 required "having protocols and procedures properly registered, updated, uploaded and with an easy access for our professionals and the different departments" (Nursing Director, Hospital L, 1-16-15). The Accounting Manager of Hospital L (1-9-9) also pointed out that this change in evaluating more standards relating to electronic processes helped them to improve control over delivery notes produced by their suppliers.

In addition, the accreditation process created a strong collaboration and teamwork spirit among several hospitals in a particular regional area. The surveyor of the auditing firm (A-1-1) described such experience as gratifying and "very positive" because it encouraged hard work and close cooperation to achieve relatively high scores in all the indicators.

Despite a broad agreement on the role of accreditation from quality assurance to quality improvement, there was a very small number of interviewees who believed that the actual accreditation tool itself was not a 'complete' improvement tool. For example, the Quality Manager of Hospital L (1-13-13) argued that some hospitals achieved the same score or even higher grades than Hospital L just making a final sprint before the final audit:

> "There are hospitals that scored the same or even higher score than us… I could say that the accreditation is an administrative formality where you only need to make a final sprint during [the final] three or four months to prepare documentation, submit the supporting documentation, and indoctrinate staff for the surveyors' visits. The actual accreditation per se is not an improvement tool… at least, not with the actual design"
>
> Quality Manager, Hospital L (1-13-13)

This view on the accreditation system suggested that use rather than design of the system has led to its quality improvement role.

5.5.2 Catalyst for efficiency: managing cost and quality

This section concentrates on the catalyst role of accreditation in managing cost and quality. Based on the interviews and document analysis, three main external PMSs were identified as having a role in managing cost and quality: hospital accreditation and two benchmarking systems (a public initiative designed by the Healthcare department and a private initiative named 'Top 20'). Whilst various internal scorecards and dashboards were also used in the two hospitals to manage cost and quality, the accreditation system was perceived by a large number of participants as the most comprehensive mechanism in place to help hospitals in managing both objectives and also a necessary requirement to guarantee a contract (as previously indicated in Section 5.4). In support of this perceived comprehensiveness of the system, the surveyor of the auditing firm (A-1-1) was of the view that the actual acute care hospital accreditation model of Catalonia was regarded as more complete than other international accreditation approaches due to its managerial style and all-inclusive perspective.

The accreditation system was designed for regulation but it was also used for cost/quality management. A close examination of the accreditation system revealed a number of indicators combining cost and quality objectives classified under broad categories dealing with issues related to efficiency, effectiveness, quality, and appropriateness. These included readmissions, re-interventions, complications, avoidable or preventable hospitalisations and average length of stay. Improvements in these metrics could address both cost and quality objectives. For example, striving to reduce readmission rate should lead to better quality of care and lower cost. The metrics however were intertwined as readmission rate could potentially be reduced by delaying discharge but this would increase the average length of stay metric. Hence, an integrated approach was needed for the management of the various metrics. A comprehensive analysis of the standards included in the accreditation manual by the researcher uncovered many indicators related to clinical and support processes which captured the relationship between cost and quality.

Indicators and measures related to cost/quality implications were primarily captured in the 'results' dimension of the accreditation system. For instance, key processes

such as ‘emergency care’ and ‘hospitalisation care’ were heavily focused on measuring the number of adverse events and their potential reasons to understand how the frequency, scope and preventability of adverse events could decrease harm from medical care. The measurement of falls from beds, patient identification errors, and medication errors of the different hospital units and services could help to detect disagreements and discrepancies in complex processes which could result in significant costs and reductions in quality. Additionally, a decrease in the number of defects using clinical processes to reduce possible complications such as the replacement of catheter every 72 hours could prevent further infections and also contain costs as some medication could be very costly for hospitals. This process of constantly reviewing standardised procedures could improve robustness and reliability over time. A list of surrogate metrics reflecting the importance of both cost containment and quality improvement in the accreditation manual is provided in Appendix K.

A large number of interviewees maintained that the accreditation model could assist hospitals not only to measure but also to manage both cost and quality objectives. The accreditation was perceived as a catalyst for simultaneous management of cost and quality by ‘helping’ and ‘forcing’ analysis of some underdeveloped clinical areas and standards:

> “The accreditation helps you if some of these issues or criteria [i.e., leadership, processes, results] in your organisation are underdeveloped because it forces you to analyse them. From this perspective it helps to improve the quality at work and also to examine the economic costs”
>
> Quality Coordinator, Hospital S (3-9-9)

The analysis of clinical protocols required for the accreditation was viewed as a facilitator for improving organisational processes and systems, which in terms of surgical activities could denote consuming less time and resources:

> “For example, if we need to make an incision and we know what is needed because it has been ‘protocolised’ [making a protocol of] then everything is all right, because if we do not have it [protocolised] maybe we will prepare more things or we will use some material that will probably not be consumed, which will lead to spending more money than needed”
>
> Customer Services Director, Hospital S (3-12-6)

Although quality improvements derived from the revision of standards during the accreditation process could in some circumstances raise the costs of a particular area or department whilst diminishing the costs in other areas or departments, the ongoing review of clinical processes and redesign of circuits and pathways was seen as helpful for controlling costs and enhancing quality. The Medical Director of Hospital S (3-16-2) perceived the process as a valuable instrument with clear performance implications in the short and long run and emphasised the importance of taking a long run approach:

> "In the short term, the quality increases for sure because things are turned upside down as you review and organise everything in the organisation. In the short term, it will probably also raise a little your costs because you are doing things that you never did before and that normally means higher costs in the early stages, but in the long term this rise in costs will lead to quality benefits. The curve of costs will initially increase, but in the medium and long term will lead to economic benefits for sure. How long it takes? I am not sure about it. For example, the 'surgical safety checklist' requires effort in terms of time and money but you need to think what will be the cost of an avoidable adverse event. In the long term you will benefit from this investment"
>
> Medical Director, Hospital S (3-16-2)

In a similar vein, the Medical Director of Hospital L (1-15-6) acknowledged that even though they did not have enough support to confirm the correlation between quality enhancement and cost savings, the accreditation process captured the interdependence of indicators via some quality and patient safety measures:

> "In order to reduce catheter-related infections, it is most likely that certain financial investment comprising antiseptics, dressings and other items will have to be made to guarantee that the catheter is replaced every 72 hours, which obviously means an increase in costs. However, fewer infections represent improved conditions on hospitalisations, antibiotics and mobility of patients"
>
> Medical Director, Hospital L (1-15-6)

Therefore, this quote showed that the longer term benefits were captured through indicators in the accreditation process even if they could not be directly linked to particular actions. From his viewpoint, patients will benefit from fewer infections which will lead to a better quality of life. In addition, the Quality Manager of Hospital L (1-13-13) maintained that the revision of clinical protocols during the

accreditation by means of reducing the intermediate steps in several processes led to quality improvement and cost savings even though it was never measured:

> "We have created many protocols and I think that we have improved more on the quality of the service than the economic efficiency. I am truly convinced about it, but we have not measured it"
>
> Quality Manager, Hospital L (1-13-13)

The auditing firm surveyor (A-1-1) believed that if organisations had well-designed processes in the three areas of ongoing care, patient safety and hospital-acquired infections, the patient average length of stay could be relatively low, which meant that costs would be reduced:

> "If you do not monitor correctly hospital-acquired infections and you do not care too much about it, the risk of patients' infection increases, which can cause prolonged and more expensive care delivery"
>
> Auditing firm surveyor (A-1-1)

The surveyor also indicated that the current accreditation model incorporated a large number of standards related to 'patient safety' such as identification of adverse effects because investing the necessary resources in such areas will make "healthcare delivery much cheaper".

Thus, interviewees recognised the function of accreditation as the simultaneous management of cost and quality despite the difficulties in capturing and calculating the tangible direct effects and relationships between the two objectives.

5.6 Summary of chapter

In global contexts where NPM ideas have been adopted, there has been a change in focus away from the use of control systems based on traditional input-oriented processes to strategic PMSs based on more balanced and comprehensive financial and non-financial indicators (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009). In the context of this study, the healthcare accreditation system is described as an external mandatory instrument rooted in the principles of the EFQM model to guarantee that hospitals are able to achieve a certain number of pre-set quality standards. The system imposes pressure on hospitals as without

accreditation, they are unable to secure a contract with the main purchaser of public health services. The accreditation is portrayed as a 'driver for change' and 'hybrid' model that combines various attributes related to compliance and regulation (i.e., quality assurance) and also opportunities to enhance performance through the evaluation of processes and outcomes using organisational engagement and collaborative learning (i.e., continuous quality improvement).

Although contracts with the key purchaser of public healthcare services included the achievement of numerous economic and non-economic objectives, recent financial climate and government cutbacks in budgets increased the importance of economic targets compared to non-economic targets. A common view amongst interviewees was of an overall dominance of cost relative to other objectives. Findings point to the complexity of the interaction between cost and quality. Staff in the two hospitals perceived cost and quality as two intertwined objectives, though there were many different examples of how they related to each other. A number of participants also pointed out that increased efficiency was not translated into increased activity for hospitals. Thus, they questioned the motivation to reduce costs as there were no incentives in their contracts to be more productive. There was also certain unease over increased reliance on economic indicators due to a hospital culture rooted in care delivery and limited experience dealing with the measurement of quality issues.

In addition, the interviews and document analysis served to identify hospital accreditation as a suitable mechanism to manage both cost and quality objectives. Many indicators evaluated during the accreditation process (i.e., readmissions, complications, average length of stay or avoidable hospitalisations) were portrayed as 'efficiency' measures and incorporated both cost and quality objectives. Interviewees perceived the accreditation system as a medium to long term investment that could deliver quality benefits and save money despite the fact that sometimes its benefits were not tangible or quantifiable. The accreditation was designed for regulation but was also embedded in cost/quality management for internal decision making[57].

[57] For example, the internal scorecard of the nursing department of Hospital L included a very large number of indicators (i.e., approximately 90%) examined during the accreditation process, which even had the same accreditation's code (i.e., 9c-01-02-04-E) next to the indicators.

Overall, this chapter illustrates the emphasis placed by governments on the implementation of NPM practices to modernise the public sector and the use of performance measurement systems to stimulate effectiveness, efficiency and accountability amongst public services.

CHAPTER 6: FINDINGS

6.1 Introduction

This chapter presents findings on the 'design' and 'use' features of the acute care hospital accreditation system using the theoretical lens of the enabling/coercive formalisation framework (Adler and Borys, 1996). It also examines the attitudes of management towards the accreditation system.

Thus, the aim of this chapter is to address research questions 2, 3 and 4 respectively:

> RQ 2: How enabling/coercive is the design of the accreditation system? (Section 6.2)
>
> RQ 3: How enabling/coercive is the use of the accreditation system? (Section 6.3)
>
> RQ 4: What are the attitudes of management towards the accreditation system and the triggers of those attitudes? (Section 6.4)

Similar to the previous chapter, this chapter reports findings based on semi-structured interviews, examination of documents and some non-participant observations. Data on Hospitals S and L is presented in an aggregated manner as findings were similar across both hospitals.

6.2 Research Question 2: Design of accreditation system

This section draws upon the views of participants to examine the second research question: *How enabling/coercive is the design of the accreditation system?* Findings are structured around the enabling/coercive framework and its four basic features (repair, internal transparency, global transparency, and flexibility) and complement some of the points covered in the previous chapter. The key themes that emerged from the data analysis have been organised under two main headings: design features related to enabling control and design features related to coercive control.

6.2.1 Enabling features of design

Findings on the enabling features of design support findings presented in the previous chapter on the role of accreditation (research question 1) as a 'driver for change' and the move from quality assurance to quality improvement. Five key features emerged as enabling features related to the design of the accreditation system. First, the self-assessment tool incorporated in the accreditation system was seen as an enabling 'repair' feature for organisational learning and continuous improvement. Second, participants perceived the comprehensive and integrated managerial view of the accreditation system as a design feature associated with enabling 'global transparency'. Third, the creation of feedback channels with the surveyors and the Health Department also provided greater 'global transparency'. Fourth, freedom to select auditing firm and contest surveyors' recommendations were seen as an enabling feature related to the 'flexibility' of the accreditation system. Finally, the evaluation of non-essential or voluntary standards (a 'flexibility' feature) was perceived to facilitate a better understanding of processes and activities not required by the accreditation system.

1. Self-assessment: opportunity for organisational learning and continuous improvement

The accreditation system was designed as a continuous quality management tool encouraging better organising and planning by means of creating, revising, and updating hospitals' processes and protocols. One of the key channels to achieve this goal was the Excel 'self-assessment' tool used in the EFQM model which was incorporated in the accreditation system and mentioned in the previous chapter. In Hospital S, the Hospital Director (3-1-1) commented on the importance of creating well-developed and consistent protocols during the first stages of the 'self-assessment' exercise in 2007-2008 because it helped to "reduce clinical variability" and "understand cross-functional processes". The Human Resources Director (3-4-4) pointed out that some of the "quantitative and qualitative" indicators evaluated during the self-assessment accreditation process were also now incorporated in the new Human Resources department scorecard because they helped to measure the departmental progress and determine their actual position against the targets and objectives pursued by the hospital. In addition, the Technical Services Director (3-

5-5) noted that the creation of a single document described as "the protocol of the protocols" during the first self-assessment process in 2007-2008 helped them to visualise the hospital processes in a better manner and created certain orderliness and increased accountability:

> "Basically it was an Excel document with all the institutional documents classified according to the type of document (i.e., medical reports, protocols, informed consent forms, etc.) indicating the date of creation, update, review, etc. (...) In order to do this we had to create the 'protocol of the protocols', which included who was responsible for the documents, how to create them, how to update them, the revision date, whether or not [they] had to go on the intranet, etc. This protocol had its own importance, because it helped us to clean up a bit our previous mess (...) because we had different updating procedures, sometimes the same documents had several versions, etc. Everything now is placed in a common file, available online, backup copies on a daily basis, etc. This helped us to create some orderliness"
>
> Technical Services Director, Hospital S (3-5-5)

This process of creating and revising protocols and plans was a valuable impetus for changing the manner of arranging and recording information. The Economic & General Services (3-13-7) and the Technical Services Director (3-15-5) of Hospital S indicated the importance of a number of plans exclusively created for the accreditation during the 'self-assessment' phases such as the Economic Management plan and the Information Management Systems plan[58]. The Technical Services Director (3-15-5) commented that they had to use their own judgment and expertise to create such plans in order to "show how information was transferred and who has responsibility for [different areas]". This was helpful in "detecting duplicates and recognising some obvious things that needed to be done".

The Nursing Director (3-14-3) also recalled a discussion during the 'self-assessment' process with other healthcare professionals related to the design of a compulsory protocol on the use of Cardiopulmonary Resuscitation (CPR) as a requirement for two of the essential accreditation standards (3b-02-E-09-E and 7b-01-04-06-E). These standards included a general training plan based on theoretical and practical issues for the entire hospital staff and a specific training plan on

[58] The accreditation system analysed the following ten plans: Strategic Plan; Quality Plan; Economic Resources Management Plan; Physical Resources & Technology Management Plan; Human Resources Plan; (Internal) Communication Plan; Information Management Plan; Customer Services Management Plan; Research and Development Plan; and Health Promotion & Social Commitment Plan.

paediatric CPR procedures for those healthcare professionals attending children (3b-02-E-09-E) and the measurement of the degree of compliance with the CPR training plan (7b-01-04-06-E). Following the creation of the first draft version of the CPR protocol, several concerns about the use of a particular type of medication were raised by a number of doctors. The Management Committee evaluated the new proposal, but decided to reject the doctors' suggestions due to a lack of scientific evidence on the benefits of the new type of drug proposed by the medical committee. Despite the fact that doctors were overruled by the Management Committee, the Nursing Director emphasised the importance of having a system which allows healthcare professionals to express their opinions. This example showed how the accreditation system provided these opportunities for medical staff.

There was a similar example from Hospital L where the self-assessment exercise led to an update and review of the entire medical and nursing protocols in the nursing department. In some circumstances, protocols were evaluated without a requirement to do so by the accreditation system reflecting the perceived benefit of this process. The accreditation was seen then as an enabling tool that provided opportunities for improvement and detection of outdated protocols that could have adverse effects on the effectiveness of clinical processes:

> "We worked very hard on the whole issue of procedures and protocols, i.e., updating procedures, latest versions available on the intranet, classification by categories such as general, respiratory, etc. (...) It was a personal project in our department and staff were highly committed. It happened a few times that even some nurses reviewed more protocols than originally planned"
>
> Nursing Head of Safety & Quality and Nurse 1, Hospital L (1-4-4)

The Quality Manager of Hospital L (1-13-13) emphasised as well the importance of giving feedback to both middle management (i.e. unit managers and supervisors) and healthcare professionals during the self-assessment process because many of the improvement actions took place during that phase. If the score given for a particular standard in the self-assessment process was not appropriate because something important was missing or the performance achieved was not satisfactory, middle management had to provide specific corrective steps that would lead to improved outcomes.

2. Comprehensive and integrated view

The acute care hospital accreditation system was designed as a multidimensional tool where the weighting of the standards was objectively integrated across the different dimensions of the model. A total of nine areas using almost 700 standards, as explained in the previous chapter, were used to evaluate how hospitals manage their (i) 'structures' (leadership, strategy, people, partnership and resources), (ii) 'processes', and (iii) 'results' (clients, people, society, and key results). The accreditation model was understood as an adaptation of the EFQM aimed at analysing quality management from an all-inclusive perspective. Expressions such as "there is no single dimension more important than the others" (Medical Director, Hospital S, 3-16-2) or "it has a global vision because it makes no sense looking at results without knowing how things are done (Human Resources Director, Hospital S, 3-11-4) denoted this multifaceted view of the accreditation. The Nursing Director of Hospital L (1-16-15) described this harmonised approach between structures, processes and results using the following words:

> "All three are complementary. The *structure* is the basis of the accreditation and processes help to identify needs. Developing a *process* such as hospitalisation or outpatient surgery can be complicated (...) but it is really valuable because you identify and visualise all the steps related to patients, professionals, etc. *Results* are closely related to processes so if you have a process rigorously controlled, identified and defined then it will lead to achieving better results"
>
> Nursing Director, Hospital L (1-16-15)

There was a broad consensus among interviewees that the relationship between the three dimensions of structure, process and results was based on the logic that good structures helped to develop proper processes and as a consequence hospitals achieved better results. Even though participants recognised the importance of linking the three dimensions, some individuals emphasised that it was reasonable to place higher emphasis on the 'processes'[59] because of the type of service and

[59] 'Processes' is the most important of the three key dimensions representing 42.39% of the total standards. 'Processes' (Criteria 5) is divided into four groups which includes: (i) four *Healthcare Key Processes*: Outpatient or Ambulatory Care; Urgent Care; Hospitalisation Care; and Surgical Care; (ii) ten *Healthcare Support Processes*: Laboratory; Blood Use & Derivatives; Medication Use; Radiology, Nuclear Medicine and Radiotherapy; Rehabilitation; Nutrition; Archives & Documentation; Clients Management; Infection Prevention & Control; and Clinical Research; (iii) six *Non-healthcare Support Processes*: Kitchen; Laundry; Cleaning; Warehouse; Administration; and Information Systems; and (iv) four *Clients Supports Processes*: Social Work; Clients Education; Ethics & Clients Rights; and Clients Support.

activities carried out in hospitals as well as the high proportion of healthcare professionals involved in the creation and revision of healthcare clinical processes, procedures and protocols:

> "From the quality viewpoint, the three [dimensions] should have similar weight. However, in which of them do we involve more individuals of the organisation? Obviously in the processes because it is more related to our field work and our business raison d'être and also because people feel much more involved"
>
> Quality Manager, Hospital L (1-13-13)

In addition, several participants recognised the growing focus on results and the key role that this dimension could play in the next accreditation process. The Economic Management Manager of Hospital L (1-10-10) supported this view but also argued that sometimes managers should try to achieve a better understanding of the processes rather than just focusing on results because paying excessive attention to results on their own could lead to valueless outcomes:

> "We should spend a little more of the time on processes because very often we skip them and we go directly to results, which is the reason why sometimes we are not able to achieve them [results] (...) We just look at results, results, and results, but some of them are not too objective. Is 'x' a good or bad result? Well, I really do not know because first I need to understand how the process or the specific goals were designed. In the end, we just compare actual figures against prior period's figures. Of course that makes sense, but it is too basic. It would make more sense using some kind of absolute value, for example, a ratio that everybody agrees upon and provides better information as, for example, discharge rates"
>
> Economic Management Manager, Hospital L (1-10-10)

In general, there was a view that the accreditation system changed its focus from input-oriented indicators to more strategic performance issues related to medical processes and clinical outputs and outcomes. This is consistent with the NPM logic of placing higher emphasis on non-financial indicators and additional examination of measurement dimensions at the organisational level (Siverbo and Johansson, 2006). Although there was a good balance between inputs, processes and outputs, a higher emphasis was placed on the analysis of medical processes because of the familiarity of healthcare professionals with the examination of issues related to clinical protocols, procedures, and pathways.

3. Creation of feedback channel

External feedback provided by the surveyors and to a limited extent by the Health Department was perceived by a number of interviewees as a facilitator for improvement of quality standards. A perceived benefit of the Catalan model was that the external evaluation of the standards was completed by independent surveyors from different organisations completely unrelated to the Health Department, which was different from other regions in Spain where it "was performed by entities owned by their territorial health departments" (Surveyor, A-1-1). The Quality Coordinator (3-18-9) of Hospital S recognised the value of the feedback received from the surveyors during the audit because it helped to indirectly compare their performance against other hospitals. Several comments made by the surveyors were viewed as a constructive tool to identify organisational strengths and weaknesses:

> "For instance, they pointed out a number of well-developed aspects, which was unusual because the majority of hospitals failed on that area. Conversely, they emphasised some underdeveloped aspects where everyone did well, but we failed (...) They highlighted a number of strong points, for example, the 'medication control risk' at pharmacy level, particularly the dual control medication risk. Hospitals struggled with this issue, but we were one of the few hospitals where everything was properly implemented. This issue caught the attention of the auditor who checked the entire process including the register of clinical histories, etc. The other example was 'medication error detection' methods where we applied cross-sectional evaluations including supervision from pharmaceutical and nursing staff to detect medication errors and incidents (...) Obviously, some areas required improvement actions, for example, the 'positive patient identification' (...) and 'the control register and management of trolleys'"
>
> Quality Coordinator, Hospital S (3-18-9)

The analysis of the 'audit report' issued by the surveyors' team at the end of the accreditation audit in Hospital L included 26 pages and was considered a beneficial feedback mechanism in understanding the strong and weak points for each of the nine dimensions assessed during the accreditation process. Hospital L achieved a final score of almost 95% failing only 37 out of the 693 standards evaluated. 'Partnerships & Resources' (Group 4), 'People' (Group 7), and 'Results' (Group 9) were the three dimensions that required more improvement actions. The final score for each dimension and some of the most relevant comments and recommendations

from the final 'audit report' are reproduced in Table 6.1 below based on analysis by the researcher.

Table 6.1 Audit report (2013) of Hospital L

Dimensions	Score (%)	Comments / Recommendations
STRUCTURES 1. *Leadership*	90.14	Underdeveloped Strategic Plan
2. *Strategy*	95.65	Improvement areas: SWOT analysis to identify potential deficits in healthcare provision
3. *People*	100	Very well-developed Human Resources Plan Improvement areas: development of videos and PowerPoint presentations related to 'welcome pack' for new staff
4. *Partnerships & Resources*	86.21	Improvement areas: quality indicators related to technical specifications, avoidance of fax communication, full record of all the checks performed by anaesthetics before surgery, and development of the Knowledge Management Plan
PROCESSES 5. *Processes*	98.31	Outstanding score: achieved 290 out of the 295 standards and very well-developed map of processes. Improvement areas: pain management indicator and avoidance of patients in public elevators
RESULTS 6. *Clients*	100	Improvement areas: conducting random surveys and focus groups
7. *People*	76.92	Improvement areas: quantification of individuals knowing the mission of the hospital; and acknowledgement, acceptance and participation in the Quality Plan
8. *Society*	100	Good report on environmental and society impact
9. *Key Results*	89.25	Good score Improvement areas: measurement of waiting lists at the A&E department

After the external audit, hospitals had to create and submit an improvement plan to the Health Department specifying very clearly the new actions in place to address the non-accomplished standards. The Quality Coordinator of Hospital S (3-9-9) indicated that this process allowed them to receive very valuable feedback from the Health Department in 2008 to revise a number of underdeveloped standards during the first accreditation process.

4. Freedom to select auditing firm and contest auditors' recommendations

As mentioned in the previous point, audits of the accreditation process were carried out by authorised organisations completely unrelated to the Catalan Administration

to guarantee independence and confidentiality. Hospitals had absolute freedom to decide the auditing firm that would conduct their accreditation assessment (López-Viñas et al., 2014). Whereas in the first accreditation process in 2007-2008 hospitals could select from five different auditing firms, only three organisations fulfilled the legal requirements to conduct audits during the second process in 2013-2014. Hospitals paid for the entire external evaluation and after its completion the auditing firm sent the evaluation report to the audited hospital, which gave hospitals the opportunity to contest the auditor's outcome.

Some participants indicated that it was possible to contest the conclusions and recommendations of the accreditation report. The Quality Coordinator of Hospital S (3-18-9) maintained that even though the process was strongly controlled and regulated, the hospital had "some time to present allegations, but they decided not to do so". There were a small number of "arguable and controversial points"; however, there was a general consensus among the top management team that the results achieved at the end of the accreditation process (96.46% of total essential standards) were extremely satisfactory. Besides, the unaccomplished standards were seen by the top management team as an improvement opportunity and extra incentive to work even harder for the next accreditation process. The surveyor of the auditing firm (A-1-1) also mentioned that the number of challenges from their audited hospitals was minimal because they always explained to their clients the problems and solutions needed to pass the required standards. She recalled a popular TV advert from Scattergories[60] in the nineties to indicate a certain degree of flexibility when examining the standards with their clients:

> "We always discuss things on the go. For example, if we fail them on one standard, we explain to them the reason why, so they can defend themselves. I always tell them the same joke: I accept rhinoceros as a farm animal starting with 'r', but not 'nick-ness' [sickness] as a disease"
>
> Surveyor (A-1-1)

Even in situations where some hospitals contested their final score, most of the time the complaints presented by these hospitals were rejected because the hospitals already knew that extra work needed to be done to achieve the obligatory standards.

[60] Scattergories is a party game where the aim is to score points by exclusively identifying objects within a set of groups or categories, given an initial letter, within a limited period of time.

The surveyor argued that only a very small number of large hospitals seeking "excellence levels" complained about the final outcome of the accreditation report and "they [hospitals in general] were happy with the score achieved regardless of being high or low" (Surveyor, A-1-1).

5. Evaluation of non-essential standards

As previously described in the earlier chapter, the final score of the hospital accreditation was based only on 'essential' or compulsory standards. From the total of 696 essential standards, Hospital L was evaluated on 693 standards and Hospital S on only 651 standards. This difference relates to the absence of standards related to paediatric units, teaching activities and some research areas in Hospital S. The second accreditation process also included 606 'non-essential' standards that had the potential to become essential standards in the upcoming re-accreditation in 2017-2018. For example, the second accreditation process in 2013-2014 incorporated 178 new essential standards (25.57% of the total essential standards) of which 164 standards (23.56%) were classified as non-essential standards in the previous accreditation process in 2007-2008 and 14 standards (2.01%) were completely new. Therefore, the evaluation of non-essential standards for the second process represented a self-assessment incentive to start to evaluate and measure some performance indicators that would be part of the next re-accreditation process.

In Hospital L, the opening of a new building at the end of 2014 for the Accident and Emergency (A&E) department was viewed by the Medical Director (1-15-6) as a beneficial opportunity to revise in greater detail all the accreditation standards related to emergency services:

> "For instance, we reviewed the whole process related to the Emergency Room (ER) services [A&E services] because this department was going to be relocated in a new building by the end of the year. The complete analysis made for the accreditation in 2013 as well as the revision of the entire outpatient surgery process, since we were also going to open a surgical unit dedicated to major ambulatory surgery, was a good exercise for reflection. It helped us to develop the standards and processes to prepare the functional plans for these new systems"
>
> Medical Director, Hospital L (1-15-6)

This revision included the assessment of 'essential' and 'non-essential' standards and indicators related to A&E and other related areas. For example, compulsory 'essential' standards comprised the different types of activities carried out in the A&E department (5d-02-D-16-E) and the measurement of numerous indicators such as A&E pressure (9c-01-02-02-E), clients returning to A&E within 72 hours from discharge adjusted by pathology, technique performed, and area or unit service (9c-01-02-04-E), mortality rate and reasons (9c-01-02-10-E) or the number of adverse events and reasons (9c-01-02-11-E). Furthermore, this revision provided an opportunity to revise voluntary or 'non-essential' standards included in the accreditation manual which could improve the quality of services provided by the A&E department in the short term. Examples of such non-essential standards comprised an objective assessment of the quality of the service when customers returned to A&E within 24 hours (5d-02-D-17-Q), measurement of internal A&E cases (9c-01-02-03-Q) or how the new A&E building would prioritise adjacency, proximity and good communication with other areas and services such as medical imaging, surgical and obstetric blocks, intensive care unit, laboratory or day hospital (4c-02-D-11-Q).

This higher emphasis on measurement and management of standards was aligned with the NPM ideology. The measurement of additional aspects at the organisational level (Siverbo and Johansson, 2006) and the evaluation of targets that cover many performance facets of organisations (Hyndman and McGeough, 2008) were perceived by interviewees as an extra stimulus for improvement because the following re-accreditation process would include a considerable number of these standards. This performance information was critical to compare potential deviations between targets and actual performance, and stress the relevance of measuring outputs and results (Jansen, 2008).

6.2.2 Coercive features of design

Two design features related to 'repair' and one feature related to 'flexibility' were identified from the analysis as evidence of coercive formalisation of the accreditation system. The coercive features of 'repair' revolved around the compulsory and enforced nature of the accreditation process. Examples related to issues that could not be resolved due to the limited scope that individuals had to

influence processes resulting in limited autonomy for changes and restricted opportunities to express opinions or judgements. In addition, there was a general perception of 'one size fits all' (Sax and Marx, 2014) approach as a coercive feature related to the 'flexibility' of the accreditation system because it did not lead to the capturing of individual needs or specific characteristics of different types of hospitals.

1. Limited autonomy for changes

The accreditation standards manual was perceived by many interviewees as a mechanism constraining their actions. Although the accreditation manual contained a description of the features that a specific plan should contain (i.e., Human Resources plan), in many circumstances, the details and guidelines described in such plans provided limited assistance in the evaluation of standards and indicators. For example, the Technical Services Director of Hospital S commented on her personal experience to create the Information Management Systems plan:

> "Sometimes we found it really hard to elaborate some plans (...) They [Health Department] just provided a paragraph explaining that the plan should contain this, this, and this (...) I found that there should be more support [from the Health Department] with this issue"
>
> Technical Services Director, Hospital S (3-15-5)

Additionally, the Medical Director of Hospital L (1-15-6) maintained that the last-minute changes imposed by the Health Department before the final audit limited the hospital's capacity to achieve better results. The incorporation of 25.57% new standards (178 out of 696 essential standards as mentioned in the previous section heading 'Evaluation of non-essential standards') "three or four months" before the accreditation audit caused significant frustration among hospital staff. Better design and planning schedules from the Health Department would have facilitated the preparation of the final self-assessment exercise before the audit, particularly in a teaching hospital with more than 3,500 employees. They realised that a large number of new standards related to 'leadership' (38 new standards), 'people' (21 new standards), 'partnerships and resources' (32 new standards) or 'processes' (60 new standards) would not be achieved because they did not have time to develop appropriate plans (i.e., strategic plan) and medical protocols to evaluate the

standards measuring the relationship between strategic objectives and some clinical processes.

2. Restricted opportunities to express opinions

Findings suggest that another coercive feature related to the repair dimension became noticeable during the design phase of the standards for the second process in 2013-2014. The Quality Manager of Hospital L (3-9-9) commented that after the first accreditation process in 2007-2008, the Health Department created several working groups to evaluate the incorporation of new standards and assess the level of satisfaction of the Catalan hospitals with a view to improving the overall experience of the process. A number of individuals from different hospitals as well as recognised healthcare experts and academics were invited to participate in this project. The aim was to share prior experiences and discuss the benefits and disadvantages of existing standards and the development of up to date standards. The Quality Manager of Hospital L was invited to take part in this initiative that was supposed to enhance collaboration between the Health Department, the network of hospitals and other organisations such as healthcare foundations, clinics and community health centres. Although the Health Department initiative was viewed by participants as a valuable opportunity to help in the development and evaluation of standards, things did not progress as promised. The limited feedback during these sessions with regard to previous accreditation results and the frustration of knowing that their proposals were never taken into consideration intensified the Quality Manager's perception that the system was restrictive. This lack of opportunities to express opinions was noted by the Quality Manager using the following words:

> "I think that before starting to evaluate all this, it would be good to know more about the results in 2008, for example, which standards most hospitals failed, standards considered difficult to evaluate for the auditors, standards where the interpretation was uncertain, etc...We never discussed that information! After all those hard-working sessions, which included eight or nine days just eating sandwiches in our lunch break, many of our group suggestions were never taken into account. At least, in deference to the people who voluntarily and without any remuneration tried to help the Health Department, we expected someone saying that they accepted 80% of our suggestions, from that 80% half of them needed some minor amendments, etc., etc. At least

> some comments! I still remember that some of the final standards came from nowhere because we all said 'no' to certain issues"
>
> Quality Manager, Hospital L (3-9-9)

This type of approach in which the Health Department portrayed an image of openness and communication, but retained the power in decision-making can be described as 'pseudo-participation' (Argyris, 1952; 1953), which refers to weak forms of participation by employees or subordinates. Although participants felt involved on a project where their opinions seemed important, they realised after some time that their viewpoint and judgments had no influence.

In addition, some participants noted the absence of a special "suggestion box" for the accreditation process at hospital level. The quality Manager of Hospital L (1-13-13) indicated that the hospital had a general suggestion box in the intranet where employees could place any recommendations and suggestions related to hospital issues, but to date feedback provided was limited. The only suggestion related to the accreditation process came from Hospital S where the Economic & General Services Director (3-13-7) and the Customer Services Director (3-12-6) noted that during the accreditation in 2008 a nurse assistant made a suggestion related to the privacy rights, dignity and comfort of admitted patients (standards 4c-04-D-09-E and 4c-04-D-10-E).

3. 'One size fits all'

The accreditation system was designed by the Health Department as an enforced mechanism with standardised indicators that offered very limited flexibility. Comments such as "restricted" (Human Resources Director, Hospital S, 3-11-4) and "strongly regulated" (Human Resources Assistant Director, Hospital L, 1-1-1) were used by some interviewees to denote the lack of flexibility of the system. There was a sense that the accreditation system was conceived as a rigid and closed system based on a 'one size fits all' approach (Sax and Marx, 2014), which did not allow any type of customisation to the specific needs or characteristics of the hospitals. Participants could not deviate from mandated rules and predefined standards and there was no possibility of skipping steps or using shortcuts when applying standards:

> "The way that the European model is conceptualised and applied at the private sector level is more open than the [Catalan] accreditation. It [European model] is a model where organisations carry out their own self-assessment based on a system of specific guidelines and standards (...). However, the accreditation is too detailed and specific and leaves no room to explore other aspects which maybe are better or more interesting for some organisations. The accreditation model is far too closed!"
>
> Quality Coordinator, Hospital S (3-9-9)

The current acute care accreditation model was seen by several individuals in Hospital L as incomplete and unbalanced because it did not distinguish between different types of hospitals. The Medical Director (1-15-6) believed that there should be at least two or three different levels of accreditation according to the complexity of the diagnoses and treatments provided by hospitals of various types (i.e., rural, general, reference, and high-technology hospitals). Similarly, the Quality Manager (1-13-13) argued that a large university hospital such as Hospital L should not be compared to a small regional hospital and suggested the creation of a fixed number of compulsory standards for all the hospitals and then a variable number of standards tailored to the specific clinical or departmental needs and characteristics of each hospital. The inclusion of several features such as the number of tasks and professionals involved during the accreditation process, the number of self-assessments and meetings before the final audit or the number of improvement actions carried out to improve quality issues could help represent a more 'balanced' assessment of the entire process. The Quality Manager recognised as well that some critical objectives and priorities of Hospital L such as the research impact on the scientific community were barely represented in the current evaluation process:

> "There are hardly any standards related to technology, very few related to teaching activities, and the research ones are a joke, i.e., the number of posters presented at congresses [standard 8a/b-03-02-06-E]"
>
> Quality Manager, Hospital L (1-13-13)

Furthermore, the focus on very specific details and elements in some of the essential standards was seen as another coercive feature related to flexibility. The Quality Coordinator of Hospital S (3-9-9) argued that sometimes the accreditation manual requested very detailed information that had little value to them. For example, one

of the standards examined if the organisation identified and registered all the quality control systems used by its main suppliers (1c-02-E-04-E):

> "The need for registering this suppliers' aspect [ISO certifications] seemed to me a little bit too excessive (...). If they ask you about the quality systems of your suppliers, you need to register this information. If you do not do it you will fail this particular standard. It is very, very, specific".
>
> Quality Coordinator, Hospital S (3-9-9)

The Quality Coordinator argued that having ISO certifications definitively ensured the achievement of certain quality procedures in terms of supply chain, but it did not guarantee that their suppliers provided better quality services. Nonetheless, he believed that this particular obligatory standard was too specific, but they had to analyse it to pass this mandatory criterion required by the Health Department.

Similarly, the Technical Services Director of Hospital S (3-15-5) argued that although accreditation standards helped to improve hospital processes and activities, in some situations the specific metric requirements of the system were viewed as valueless. She provided the example of medical records availability to illustrate the limited significance and value of recording and measuring the frequency of clinical history:

> "Many things [i.e., clinical protocols and pathways] were exclusively created for the accreditation, but they helped us with many other issues. A number of these things had never been registered or analysed beforehand (...) but there were other things where I did not see the value. For instance, the availability of the medical history records... when it asked us how many minutes per month or per year, healthcare professionals did not have access to medical histories. To me, this had no value. In this hospital, we are now changing the computer servers and we are having many information cuts. If you analysed this issue, out of context, you could see that there were some periods where people could not have access to medical records, etc. (...). What value or conclusions would you take from this?"
>
> Technical Services Director, Hospital S (3-15-5)

6.2.3 Summary of findings on Research Question 2

This section presented the findings on the design features of the accreditation system. On the one hand, accreditation was perceived by interviewees as a self-

assessment tool supporting organisational learning and continuous improvement based on the creation of feedback channels and a comprehensive view that allowed a certain degree of freedom in terms of selecting auditing firm, contesting the recommendations and conclusions made by the surveyors, and evaluating 'non-essential' standards. On the other hand, accreditation was seen as a highly rigid and inflexible system which provided limited autonomy for changes and opportunities for using participants' capabilities and skills. The design of the accreditation system was also portrayed as a 'one size fits all' approach with limited flexibility.

Findings suggest that the accreditation system was designed by the Health Department in both coercive and enabling ways. This coexistence was reflected in the different views of participants towards the accreditation system during the interviews, but also based on an analysis of the standards' manual and other key documents.

6.3 Research Question 3: Use of accreditation system

This section sets out the findings related to third research question: *How enabling/coercive is the use of the accreditation system?* Findings are presented based on the enabling/coercive formalisation framework and its four key features. The main themes that emerged from data analysis have been subdivided into features relating to enabling and coercive control. Findings show that participants perceived that the accreditation system was used in both an enabling and coercive manner.

6.3.1 Enabling features of use

Similar to earlier findings on the enabling features of design, some findings on enabling features of use reinforced the view offered in the preceding chapter on the role of accreditation as a 'driver for change', supporter of a move from quality assurance to quality improvement, and facilitator for managing simultaneously cost reduction and quality enhancement. Findings revealed that the enabling use of the accreditation system (primarily internal and global transparency) was related to the following aspects of the system: (1) leadership and management involvement, (2) teamwork, and (3) external collaboration.

1. Leadership and management involvement

An important issue that emerged from the interviews was the enabling character of internal information channels which improved the transparency of the process. The evaluation of the accreditation standards through activities such as meetings and the unconditional support from top management were seen as useful mechanisms to cascade information down and promote discussions on quality improvement.

Meetings in Hospital L were seen as a vehicle for recognising the value of the jobs and activities performed by peers and colleagues in the same department. For example, in the Economic & Finance department, the Quality Manager assisted the director of the department with the coordination and evaluation of the standards during the early stages of the process to find out the documentation needed for each of the five sub-departments[61]. The Accounting Manager (1-9-9) believed that the hard work during the revision of the 45 standards (out of a total of 693) carried out in the Economic & Finance department allowed them to pass every single standard during the final audit. She revealed that their director delegated some responsibilities to a manager within the department to supervise and coordinate the necessary actions to achieve the standards:

> "Next to each indicator there was a column with the initials of the manager responsible for the standard. For instance, my boss [Economic & Finance Director] nominated an individual in our area to coordinate all the standards (...) Everyone had to do his/her own job and more or less every two weeks we had meetings to see the progress of our indicators. Then, we gave all the information to the coordinator in our department. We almost knew that we would achieve all the standards. After that, we had a pooling session with our boss where he asked us very specific questions about some standards"
>
> Accounting Manager, Hospital L (1-9-9)

According to the Quality Manager (1-13-13), meetings in the Economic and Finance department were seen by employees as a mechanism for reaching collective consensus on the evaluation of the standards, particularly when more than one department was involved in the process. For instance, each director or manager was responsible for the analysis "one by one" of their departmental standards in order

[61] The five sub-departments of the Economic & Finance department are Billing, Management Accounting, Economic Management, Logistics & Purchasing, and Administrative Contracts.

to be consistent with the criterion established by the Quality Committee of the hospital:

> "All the standards were evaluated one by one by their corresponding directors or managers who were also responsible for making their own group assessments. Some groups involved four or five people and some standards had two or three managers within the same group because there was more than one medical department involved in the evaluation (...) Then, directors or managers evaluated all the standards one by one within the group [Quality Committee] because the score given by each director had to be validated by the other members"
>
> Quality Manager, Hospital L (1-13-13)

The Nursing Director (1-16-15) emphasised that "cascading down the information" to the nursing managers and their assistants was critical to facilitating access to information related to the accreditation and understanding how to answer favourably the surveyors' questions and demands. Following the unconditional support from the General Director of the hospital, the nursing department leaders tried to do the same with their own teams:

> "I had meetings with my assistants where we reviewed all the indicators and analysed areas with some difficulties and processes that needed improvement (...) and they [my assistants] did the same with their assistants. Therefore, we tried to cascade down the information in the hospital"
>
> Nursing Director, Hospital L (1-16-15)

This information sharing with lower levels was also mentioned by some participants at the Economic & Finance department. The Accounting Manager (1-9-9) revealed that although in the first accreditation process she "had no involvement at all" during the second process, their director adopted a participative and collaborative approach trying to involve all the staff of the department. This new collaborative style was very different to the strategy followed by the same departmental director during the first accreditation in 2007-2008 in which only one individual took control over the entire process:

> "During the first accreditation there was an individual responsible for the entire Economic & Finance department. My only perception about the first accreditation was that I did not see its magnitude as I did in this second one. This individual asked me things about suppliers, inventory, and so on, and I explained to him about them. I had no involvement at

> all (...) The accreditation in 2008 [first process] went unnoticed, but now my boss... by the way, I think he has done really well in this sense, he has tried to involve other people to decide what needed to be done, etc. and I have tried to do the same with people under my command. For example, my team reviewed several documents four times"
>
> Accounting Manager, Hospital L (1-9-9)

Similarly, the Quality Coordinator (3-9-9) of Hospital S revealed that several meetings with the directors of the Management Committee and occasionally with some middle managers working together at different medical and nursing departments helped them to improve issues related to the clarification and refinement of certain standards. The Quality Coordinator recognised the importance of accreditation meetings because sometimes it was difficult to understand how a particular standard could be integrated within the entire cycle of operations or activities carried out in a specific department of the hospital.

Therefore, there was a broad consensus among interviewees that top management teams and those above them in the hierarchy provided continuous support and assistance during the process. The small size of Hospital S facilitated reaching a sense of closeness and proximity amongst directors, particularly "when we were getting close to the accreditation audit" (Human Resources Director, 3-11-4). The Quality Coordinator (3-9-9) revealed that without the Hospital Director's support it was extremely complicated to organise and "mobilise" the accreditation process. The Hospital Director (3-19-1) emphasised the high commitment of the entire organisation towards the achievement of a very good score for the accreditation:

> "The accreditation issue and quality concerns are part of the DNA of our institution. The top management team and the board of trustees have always prioritised these issues and it [accreditation] is one of the main points reviewed during our directors' meetings. One of the key topics in our agenda is always dedicated to quality issues. They [board of trustees] are really interested in governance issues and we [top management team] try to transmit these ideas from the executive level to the entire organisation. We have worked really hard during the past years so it is not a surprise that we have passed it [accreditation] with flying colours"
>
> Hospital Director, Hospital S (3-19-1)

In Hospital L, the Nursing Director (1-16-15) also indicated that the Hospital Director was actively involved in every meeting and "waited with us the final day

of the accreditation audit until 10:30 pm for the results". The Nursing Director portrayed the Hospital Director as a motivating individual who became a key figure during the meetings to ensure that "all the indicators were revised one by one".

2. Teamwork

The accreditation process was viewed as a critical vehicle for greater teamwork and better outcomes by means of greater local transparency (department level) and global transparency (organisational level).

A large number of interviewees perceived the accreditation process as a beneficial mechanism to improve the coordination of activities and processes within the same department. The Medical Director of Hospital L (1-15-6) referred to hard work in the development and preparation of some essential standards related to the 'surgical safety checklist' (1b-05-E-06-E, 1b-05-D-05-E and 5d-04-D-16-E) because they did not know the surveyors' criteria for evaluating such standards. Although the procedure was properly developed based on directives issued by internationally recognised organisations (i.e., link between the surgical checklist and patient safety, and actions related to the verification process) and fully operational for the past 12 months, there were some issues which needed to be addressed to make sure that the standard was achievable: "for instance, we did not know if we had a very good monitoring compliance rate because we only conducted a few quality assessments despite having the total percentage of patients scheduled for surgery". Based on their previous experience during the audit process in 2007-2008, there was also a concern about the simultaneous or 'dual evaluation' process followed by the surveyors during the audit because they frequently assessed indicators not necessarily related to the area under investigation. For this reason, they prepared the accreditation process in 2013-2014 as an exam:

> "We prepared it as people do when facing a final test. While they [auditors] were in the operating rooms that year [accreditation in 2008], they used it as an opportunity to check things such as informed consents forms, expiration date on drugs, etc. (...), which I believed were things more frequently related to hospital wards issues (...) We worked really hard to make people aware that it was not only important to know about their area but also about other things at more general level [within the medical department]"
>
> Medical Director, Hospital L (1-15-6)

The style of review by auditors encouraged greater preparation which led to greater knowledge and understanding. The benefits of a better understanding of one's own department was also shared by the Accounting Manager in Hospital L (1-9-9) who argued that standardisation by means of following protocols and developing systematic processes during the accreditation provided clear benefits to the staff at the Economic & Finance department because they learned to work in a similar way:

> "As we worked together with other individuals during the accreditation, it helped me to learn things I did not know about the department (...) I think that it [accreditation] has paved the way for describing how circuits [pathways] and protocols should work so everyone works in a similar manner. An important issue is that these things [circuits and protocols] stay within the organisational systems (…) and it is not a 'word-of-mouth' communication where some meaning gets lost after a third translation"
>
> Accounting Manager, Hospital L (1-9-9)

The Accounting Manager also indicated that discussions over the 'invoice processing' protocol were really helpful in increasing employees' awareness of the growing importance of online communication and having well-developed purchasing systems, For instance, two essential standards required for the accreditation (4a-04-E-04-E and 5d-16-D-07-E) promoted the registration and evaluation of supply products as well as the coordination between the accounting and warehouse areas to coordinate supplier transactions based on purchases and deliveries:

> "For instance, as soon as the Pharmacy department receives the goods, then it issues a delivery note and we match this delivery note with an invoice (...) In the past, all these things were in paper format, but nowadays everything goes electronically... 12% of the total invoices are electronic. Our supplier places an invoice on the website, then I have to match the delivery note with the invoice, and finally, I pass it to the person in the Economic & Finance department responsible for payment"
>
> Accounting Manager, Hospital L (1-9-9)

During the two and half hour interview with the Logistics & Purchasing Manager of Hospital L (1-11-11), the researcher had the opportunity to observe how the purchasing software package was used to integrate different activities included in the sub-departments of the Economic & Finance department. Examples included

the classification of the 20,000 items or products used in the hospital, the traceability of prosthesis and the update system for stock levels. The Logistics & Purchasing Manager revealed that during the accreditation audit, the surveyors enquired about the relationship between the purchasing activities and the accounting department. His description of the entire process between delivery notes and invoices was used during the audit to strengthen the importance of accounting as a vehicle to communicate information across the five areas in the Economic & Finance department. Despite the fact that these five departments had always worked closely together, there was a broad belief that the accreditation system helped them to know each other even better:

> "For example, we rely on the Logistics department to make our planning needs and then we can make the contracts, but sometimes we did not know how long it would take to make certain types of contracts (...) but now I think that we know more about each other works which it has helped us in our daily work, too"
>
> Contracts Manager, Hospital L (1-12-12)

Furthermore, the Economic & General Services Director of Hospital S (3-13-7) believed that it was helpful to organise and revise pathways and processes during the first accreditation process because various activities outside her area of expertise related to General Services (i.e., kitchen, cleaning, and laundry services) were also included in the accreditation standards evaluation of her department:

> "In my personal case it really helped the first time [first accreditation in 2008] because my previous jobs were not related to the health care sector. At that point, reading the protocols and processes helped me to understand the differences with my previous work experiences"
>
> Economic & General Services Director, Hospital S (3-13-7)

The Economic & General Services Director commented that having protocols for each of these activities externalised to different suppliers was critical to understand some issues outside the accounting and economic domains but within the activities of the department. The completion of a 'mock exercise' before the final audit and continuous communication with the managers of each of these external services and the Quality Coordinator were seen as extremely valuable to recognise the importance of the whole range of activities carried out in Economic & General Services department.

A detailed examination of the entire standards' manual by the researcher (see Table 6.2 below) revealed numerous aspects that resonated with participants' perceptions of how the use of accreditation led to internal transparency and was thus enabling.

Table 6.2 Enabling 'Internal transparency' features (extract Standards' Manual 2013)

Leadership (Group 1)
- Leaders have up-to-date objectives and budgets on activity, economic performance, productivity and quality in relation to their scope of competency (1b-03-E-11-E)
- Leaders have periodic information to monitor the budget and detect deviations (1b-03-D-02-E)
- Leaders review the results of their area of responsibility in a systematic and continuous manner (1b-03-R-01-E)
People (Group 3)
- There is a work group or several work groups for the assessment of activities related to: (i) pharmacological therapy, infections and transfusions (3c-01-D-01-E), (ii) clinical documents and confidentiality (3c-01-D-02-E), (iii) tumours, tissues and mortality (3c-01-D-03-E), (iv) bioethics and deontology (3c-01-D-04-E), and (v) patient quality and safety (3c-01-D-05-E)
Processes (Group 5)
- Processes are coordinated and integrated within each department or service or functional unit and with each other (5a-01-D-05-E)
- The organisation applies procedures to guarantee that information flows between the personnel responsible for customer care (5d-03-D-23-E)
- There is coordination between scheduled and emergency surgery (5d-04-D-01-E)
- The organisation and specifically the leaders involved periodically assess the effectiveness and efficiency of the surgical activity performed: records of cancelations, theatre performance, delay at the start of the first operation, consumptions and stocks (5d-04-R-01-E)
- There is a multidisciplinary committee that coordinates the infection control activities (includes for example specialised doctors in infectious pathology, microbiology and epidemiology, pharmacy, and sterilisation staff) (5d-13-D-05-E)

For example, in the 'leadership' dimension (Group 1) the accreditation promoted internal transparency through the ongoing revision of information (i.e., productivity, quality and budget deviations) by the directors or managers of each department in relation to their "scope of competency" and "area of responsibility". Several standards in the dimension of 'people' (Group 3) and 'processes' (Group 5) required the formation of work groups and multidisciplinary teams which interviewees perceived as leading to knowledge sharing and greater internal transparency. Teamwork at 'medical' level was encouraged by the evaluation of activities and processes at different clinical departments including pharmacology, dentistry, patient safety, customer care, and emergency surgery.

Additionally, a recurring observation made by interviewees in both hospitals was that working together with other services during the accreditation helped them to better understand the activities and processes of other departments. Activities involving protocol sharing and revision of shared clinical pathways encouraged discussion of improvement actions, building relationships and understanding between areas.

In Hospital S, the Nursing Director (3-14-3) commented that working together with other departments and colleagues during the accreditation process was extremely helpful for understanding efficiency indicators that intersected with more than one area. This extract is an interesting example of how the nursing and the accounting & finance departments' discussions over ulcer prevention standards assessed in the first accreditation process in 2007-2008 led to greater cross functional knowledge on how quality improvement and cost containment can be managed simultaneously:

> "Accounting & Finance looks at the numbers and tells me that I am spending more money than expected. I tell them that as a result of spending more resources in 'x' I will save money in 'a', 'b', and 'c' and we will avoid having more ulcers and more costs associated with patient falls. They [Accounting & Finance] only see numbers, but if you explain to them the interrelation between things, then they recognise your actions. If we do not make this interrelation and everyone works separately, we are not going to be able to reach a mutual understanding. We will be fighting and having disagreement all the time because I need to spend and they need to save. I need to spend because I need to have good results. I check what I need and then I can see that if I do not have certain things the quality of care will decrease, which will cause an increase in costs because the patient will stay at the hospital for a longer period of time (...) I use this example because both areas are very distant, but when we explain the reasons behind our decisions we become closer"
>
> Nursing Director, Hospital S (3-14-3)

The Economic & General Services Director (3-13-7) corroborated this account by the Nursing Director and also described the hospital as an organisational structure where various departments that frequently had different objectives collaborated together to achieve the same goal of accreditation. The accreditation process was seen as a process which supported varied flows of information across different departments or units:

> "A hospital does not work only with doctors; we also need cleaning or maintenance services. Someone has to issue the invoice to get paid and someone has to take care of payroll issues. I understand that we are a support service, but we obviously need each other because everything is associated. The doctor can produce as much as he wants, but we need someone creating an invoice, collecting money, etc."
>
> Economic & General Services Director, Hospital S (3-13-7)

Furthermore, the Technical Services Director (3-15-5) revealed that one of the particularities of the technical services department was the provision of many indicators to other hospital areas. This aspect strengthened their understanding of the requirements and operations carried out by every single department and made possible the achievement of "a more global insight" of the accreditation:

> "Everything related to patient safety and direct care comes through the Information Systems software so, in principle, we are the ones responsible for doing the training, implementing new procedures, etc. This means that we know pretty much everything. Every time a new document for quality of care or patient safety had to be created we had to review many circuits [pathways]. We participated in the process in some way or another. This helped us to get a very strong position within the institution"
>
> Technical Services Director, Hospital S (3-16-2)

The Hospital Director (3-19-1) also believed that sometimes his overseeing role of 'general director' did not allow him to have a complete and clear understanding of very specific activities that took place in particular services or departments. During the accreditation process, for instance, the surveyor congratulated them for having a very well-designed "sterilisation process" (i.e., standards 5d-13-E-08-E, 5d-13-D-11-E, 5d-13-D-12-E, 5d-13-D-13-E, and 5d-13-D-17-E), which included "even more controls than the ones required" in terms of reception and conditioning of the material to be sterilised, its performance, traceability and reports on incidents. According to the Hospital Director, the accreditation audit allowed them to appreciate the value of a large number of unnoticed individuals that worked with great enthusiasm and professionalism at lower levels during the entire process. It also encouraged higher levels of cooperation and teamwork amongst members of the top management team to reach the goals pursued by the hospital:

> "They [directors] care about other departments. I always tell them that at the Management Committee we do not just wear the hat of the

> Medical Director or the hat of the Accounting Director or the hat of the Nursing Director. We all wear the hat of the Hospital and we need to take off the hats of our departments in order to look at the common goals of the institution as a hospital. This is not always possible because we are human, but the accreditation has forced us in some way to look at the person next to you and cooperate on achieving direct results not only focused on our personal department."
>
> Hospital Director, Hospital S (3-19-1)

Similar experiences and practices took place as well in Hospital L. The Medical Director (1-15-6) mentioned that the medical department worked together with the nursing department on a regular basis because many of the standards assessed during the accreditation process involved the analysis of cross-sectional areas by the Safety Commission. In addition, the Accounting Manager (1-9-9) provided an example where the collaboration between the medical, nursing and accounting departments assisted them to better understand the 'non-accounting' side of a clinical process. They had to elaborate the protocol of 'intermediate products derivation' which included, for instance, the channels used by the accounting department to pay suppliers when tests were externalised to other departments or organisations outside the hospital:

> "To be honest, I did not know much about it [entire process], but after that I realised that one of the main duties of the doctor was to establish the required quality levels, which explained why an X-ray had to be done in a particular way, why the generic studies had to be carried out only in hospital A or why some standards were needed, etc."
>
> Accounting Manager, Hospital L (1-9-9)

A close examination of the standards' manual by the researcher (see Table 6.3 in the next page) showed several facets associated with participants' perceptions of global transparency. For instance, standards included in the dimensions of 'leadership' (group 1), 'strategy' (group 2), 'people' (group 3) and 'partnerships and resources' (group 4) encouraged the use of internal/external channels (i.e., top-down, bottom-up, and horizontal) to communicate information to the hospital's personnel and its stakeholders through different plans (i.e., strategic plan, training plan) and activities (i.e., prevention and control, collective knowledge). The researcher observed that employees in Hospital S knew the hospital's mission (1a-

01-D-03-E) because after the first accreditation in 2008 the mission statement was reproduced on the reverse side of their personal ID cards.

Table 6.3 Enabling 'Global transparency' features (extract Standards' Manual 2013)

Leadership (Group 1)
- All the people in the organisation know the mission (1a-01-D-03-E)
- The strategic plan has been communicated to the personnel of the organisation and to the stakeholders (1b-04-D-03-E)
Strategy (Group 2)
- Executive management and the members of the management team have a structured document (dashboard) that provides them with the information necessary for the analysis with the established periodicity (2b-01-D-05-E)
- The organisation has designed, within its internal communication plan, a system to periodically disseminate its strategy to everyone (2d-02-E-01-E)
People (Group 3)
- The training plan includes training for the entire staff on infection prevention and control (3b-02-E-08-E)
- The organisation has procedures in place to guarantee: top-down communication (i.e., operating regulations, meeting notices), bottom-up communication (i.e., suggestion boxes, staff satisfaction surveys), and horizontal communication (3d-02-E-01-E)
Partnerships and resources (Group 4)
- The organisation has a plan to foster the detection, development, organisation and dissemination of collective knowledge (4e-03-E-01-E)

This section showed how increased transparency and extensive use of performance measurement promoted teamwork across departments in the two hospitals. It also reflected the attempts of NPM reforms to reduce inefficiencies by means of controlling costs and improving quality standards (Kelly, 2008; Lapsley, 2008; Boyne and Walker, 2010). Despite the growing number of standards in medical practical (Triantafillou, 2014), the comprehensive use of financial and non-financial indicators encouraged by the logics of NPM (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009) seemed to foster cooperation among individuals at different departments.

3. External collaboration

The use of the accreditation system was also perceived as leading to greater external collaboration as it provided an opportunity to engage in improvement activities with external organisations. The Quality Manager of Hospital L (1-13-13) affirmed that

several documents created for the accreditation such as the Code of Ethics, the Informed Consent Form and the Jehovah's Witnesses' Protocol were extensively used and reproduced by other hospitals owing to the cooperation and collaboration between different healthcare organisations. As a result of the accreditation system, some hospitals created very gratifying alliances with other organisations that were still running on a regular basis:

> "As a result of the accreditation we also offered help to a nearby hospital and we created a group of quality coordinators integrated by the hospitals of the Catalan Health Institute to share information (...) We have worked together for the past years having meetings every two months. We do not just talk about the accreditation, but also about other problems that we share. The accreditation has been a great opportunity in this sense"
>
> Quality Manager, Hospital L (1-13-13)

The Medical Director (1-15-6) and the Economic Management Manager (1-10-10) of Hospital L also confirmed their support and provision of relevant information to the 'nearby hospital' to help that hospital to improve its quality standards before the final audit. Similarly, the surveyor of the auditing firm (A-1-1) revealed that a number of hospitals from a different territorial area created a group that was still working together on varied issues related to the accreditation and other continuous improvement activities:

> "It began seven years ago and I can say that more or less they have achieved similar scores in all the centres (...) because they have been working very closely. Sometimes if a hospital did not understand something, it asked others for support. This helped them with many indicators [accreditation]"
>
> Surveyor (A-1-1)

A review of the standards included in the accreditation manual revealed several requirements such as the provision of "information that allows us to make external comparisons" (2a-03-E-03-E) and "participation in activities with other entities to share experiences and knowledge" (2a-03-D-01-E) that were seen as examples of enhanced external collaboration.

6.3.2 Coercive features of use

Four broad themes emerged from the analysis of the coercive use of the accreditation based on the view of interviewees: (1) restricted access to information, (2) poor communication and engagement with lower staff levels, (3) a top management tool, and (4) the limited support and feedback from Health Department. These views revealed the coercive nature of the use of accreditation based on the two 'transparencies' features of the system: internal transparency (headings 1 and 2) and global transparency (headings 1, 3 and 4).

1. Access to information

Restricted access to information on the accreditation process was viewed as a coercive feature at departmental (internal transparency) as well as organisational level (global transparency). Staff access to accreditation information was regulated in accordance with their work profile, needs and responsibilities. These 'boundaries' were particularly noticeable during the interviews with the five managers from the Economic & Finance department in Hospital L. The Billing Manager (1-8-8) indicated that she had "only access to receivable invoices, but not to the entire system related to purchases". The Accounting Manager (1-9-9) also commented on this matter pointing out that some individuals within the department (i.e., managers) had more access than others (i.e., assistants):

> "I only have access to mine [indicators] not to others, I mean, we have access to the ones at the Finance & Economic department, but only for individuals like me [managers] who have some kind of responsibility".
>
> Accounting Manager, Hospital L (1-9-9)

This view was also echoed by the Economic Management Manager (1-10-10) who argued that only individuals directly involved with the accreditation process had access to the information. However, managers within the Accounting & Finance department believed that it would be beneficial for the organisation to be more open with the information related to the accreditation process. The Accounting Manager affirmed that it would be interesting to know how other departments dealt with the indicators:

> "I cannot see other indicators [from other departments] (...) although at some point, to be honest, I thought it would be a good idea to know more about other areas."
>
> Accounting Manager, Hospital L (1-9-9)

The Economic Management Manager observed that increasing the level of information available to staff as well as external stakeholders would be advantageous because it could help for instance to detect and fix errors related to the accreditation process much faster:

> "I have unlimited access to information and I feel privileged, but this is because my job position allows me to stay close to those people [i.e., Economic & Finance Director] who have access to everything (...) Maybe having access to all the information is too much, but I will certainly allow access to a large number of things. First, more people should have access because it serves as a mechanism to detect errors (i.e., you see something wrong, and then you go to the source and fix it). Second, we are using public resources so people should have access to information both internally and externally (...) Perhaps I do not see it as a big deal because I have access to the information, but if you ask someone from the nursing department working at the fourteenth floor, she will find very difficult to get this type of information"
>
> Economic Management Manager, Hospital L (1-10-10)

Restricted access to information was also evident in Hospital S. The Quality Coordinator (3-9-9) indicated that each department only had access to its own indicators. For example, in the ER services, quality indicators of that area were only accessible to the ER manager and higher managerial levels such as the Medical Director, the Nursing Director and the Hospital Director. The Medical Director argued that even those at top management level sometimes did not have access to the information related to accreditation:

> "I often do not have access to non-medical indicators. Sometimes during the accreditation process I had to phone other directors such as the Economic & General Services Director and the Human Resources Director to ask them where to find some information and how to revise it because I did not have a clue. In my area, I had total access, but then in other areas I had to ask for access when information was restricted"
>
> Medical Director, Hospital S (3-16-2)

2. Communication with lower staff levels

Good communication and engagement with staff at lower levels was seen as a real challenge for both hospitals, particularly for Hospital S. Even though all the directors of Hospital S were fully aware of this issue, they recognised the difficulties in trying to implement mechanisms for improvement:

> "We register and analyse many things and sometimes there are comments in our forums [intranet], but communication from middle management to lower levels is really, really difficult (...). We have people that do not care at all about these things, but we also have other people really interested in it"
>
> Technical Services Director, Hospital S (3-15-5)

> "Each semester we update all the quality and safety indicators in our intranet. I always try to communicate this information to the managers of each service in our monthly meetings, too. This information reaches the heads of each service, but the big problem is getting down from there! When I talk to the physicians [in the corridor] sometimes they asked me: how is our current levels of infections 'x'? Although this information is already in the hands of the head of the service, we are not able to reach the bottom level. I think that we [directors] have too much information and sometimes we do not want to overload them with it"
>
> Medical Director, Hospital S (3-16-2)

The Nursing Director (3-14-3) recognised that information was poorly communicated down in the hospital and employees often perceived the analysis of processes and indicators for the accreditation as "something extra and an obligation" rather than an improvement of their daily job activities. For instance, the analysis of indicators related to 'fall prevention' (standards 1b-05-E-08-E, 1b-05-D-07-E, 9c-01-02-11-E and 9c-01-03-13-E) was meant to be a valuable tool to evaluate patient safety and understand the reasons behind accidents (i.e., elderly patients, slippery floor) to prevent future accidents, but health professionals did not see it that way. The hospital had to develop different actions (1b-05-D-07-E) to assess fall prevention using a number of indicators that registered the physical structure (i.e., non-slip floor, hand rails, ramps, etc.) and the evaluation and risks of patient falls (i.e., medication, transfer to other units). An appropriate monitoring and recording of such indicators was critical to determine the number of adverse events in the areas of A&E (9c-01-02-11-E) and hospitalisation (9c-01-03-13-E)

using measures related to falls from beds, chairs or wheelchairs and errors in identification and medication listed by unit, service, pathology, and admission days. The Nursing Director argued that the evaluation of these standards should benefit health professionals and the hospital in two ways. First, a small number of accidents should translate in fewer falls, fewer problems at patient levels, and higher safety levels for the employees. Second, it would result in lower cost for the hospital because patients could return home "in one piece", without any added costs. Therefore, the use of formalised standards, protocols and indicators could help to better plan activities, although she affirmed that "our managers, including myself, do not give enough feedback to lower levels on issues such as explaining why we do certain things". Furthermore, the Nursing Director believed that one of the main problems was that information was transmitted in a 'global' rather than 'local' manner. A new approach based on communicating performance at departmental level was needed:

> "It should be done by areas and then explain the global implications, which means that we all have done a very good job, but department X has done a really good job because of 'a' and 'b', and department Y due to 'c' and 'd', and so on. The most important thing is how we explain information to others, and it seems that trying to explain it at global levels is not working in current times. If we explain it from big to small, it seems that their job [lower levels] is not noticed and we do not appreciate their daily activities. Therefore, they do not recognise the information we are trying to communicate to them"
>
> Nursing Director, Hospital S (3-14-3)

The Human Resources Director (3-11-4) also commented that they should learn to delegate more to lower levels so everyone could understand that the accreditation "belonged to all of us". The Human Resources Director admitted that communication obstacles were also a "cultural" issue, because employees always expected to be told what to do next. She pointed to "self-criticism" over these issues arguing that the intended communication plans did not work as expected and consequently the current flows and channels should be revised:

> "Unintentionally, we have accepted too much responsibility. At management level we have taken control over the accreditation process, but I think that we should delegate more to lower levels so everyone understands that this process belongs to us all. It is really important to ask people to register absences, substitution rates and so on, because

> then I can have an indicator that measures absence or coverage issues. However, if I do not explain these things to them, sometimes people do not understand why they have to do certain things. They do not see the end goal"
>
> Human Resources Director, Hospital S (3-11-4)

Additionally, the Human Resources Director maintained that lower staff levels showed a certain reluctance to implement new techniques and instruments related to the accreditation process. Employees did not show much interest and motivation to ascertain for example the reasons why the hospital was developing particular activities or clinical processes to improve its performance:

> "Since the past year we have been working on quality and safety issues, which is completely associated with the accreditation model. We have showed them [employees] the current quality initiatives with the purpose of giving a little more of a 'quality culture' and rationale behind our model so people understand the type of conceptual framework that we use. This is another gap that we have in this organisation because sometimes people do not understand why we do certain things, for instance, why we asked them to quantify the patient bracelet for satisfactory identification. These are patient safety indicators totally related to quality issues, medication errors, medical errors, etc. We are now working on this area and the whole idea is going step by step to make sure they understand what needs to be done"
>
> Human Resources Director, Hospital S (3-11-4)

In Hospital L, the Economic Management Manager (1-10-10) pointed out that during the accreditation process many individuals knew about it because they had to carry out activities that were related to particular processes and protocols evaluated by the accreditation system, but not because they really understood the entire meaning of the process. They knew that once that process was over, a small announcement would be posted on the hospital's intranet showing the final score achieved. Other than that, he argued that having a clear understanding of the whole idea behind the accreditation was not easy because there was not a widespread culture promoting quality improvement and access to relevant information was rather limited:

> "If I have to explain the concept of accreditation I can say that it is a requirement from the Catalan government, etc., etc., but I find it hard to believe that they [employees at lower levels] will understand its insight. Sometimes it is even difficult for us to understand it so just

> imagine for someone who is not involved... almost impossible (...) Besides, even if they are interested to know more about it, they will find it is very difficult to get information access"
>
> Economic Management Manager, Hospital L (1-10-10)

3. Top management tool

A recurrent view in the two hospitals was that the accreditation system was used primarily as a top management tool. In Hospital L, the Economic Management Manager (1-10-10) maintained that individuals at lower levels were only concerned with their own responsibilities and did not pay much attention to the global vision of the accreditation system. Expressions such as "I did not spend any time looking at other departments in relation to the accreditation" and "I did not know if the rest of the departments had proportionally more or less standards" were used by the Economic Management Manager to describe the accreditation as an instrument strictly restricted to local or department purposes. Furthermore, it was also perceived as a coercive mechanism to ensure compliance with regulatory requirements rather than anything else:

> "We have to do it as an obligation, but not devoting too much time to it... well, except perhaps top management level or others involved in managerial activities. I have this perception of compliance with standards (...) I think what is missing is having a comprehensive viewpoint and understanding of the correlations between things. Does it help? For sure, at least to the top management team because they are on top of these things and have a comprehensive vision"
>
> Economic Management Manager, Hospital L (1-10-10)

Similarly, in Hospital S, the Quality Coordinator (3-9-9) acting as a link between top management and middle & lower managers believed that the accreditation process failed to permeate to lower organisational levels. He perceived the accreditation as a top level instrument due to the managerial design and approach adopted by the EFQM and its integrated view to amalgamate the three key areas of structures, processes, and results. Despite the fact that commitment was high at top management level, the Quality Coordinator believed that those individuals at lower levels did not capture the full picture of the accreditation because they only interacted with issues related to their area of expertise:

> "I believe that the integrated view of the accreditation remained pretty much at management level and it really did not reach down to lower levels. Even if we ask the directors of each department about the accreditation, I am not sure that they would be able to integrate everything (...) At lower levels of the departments the most common approach was to know very well about the aspects interrelated with your own area. For example, a medical healthcare professional would be concerned about radiology, laboratory and pharmacy, but less concerned about purchases, maintenance or economic issues"
>
> Quality Coordinator, Hospital S (3-9-9)

This point of view was also shared by the Human Resources Director (3-11-4) after recalling that some 'basic' things such as the strategy of the organisation were still unknown by a large number of employees:

> "I wished the accreditation could help us to communicate more clearly the hospital's strategy because I thought it was important. People need to understand our courses of action, strategy, development of processes and teams, how to reward and encourage certain types of work, etc."
>
> Human Resources Director, Hospital S (3-11-4)

4. Support and feedback from the Health Department

Interviews revealed that another downside of the accreditation system was the limited support and feedback provided by the Health Department. Interviewees such as the Medical Director (3-16-2) of Hospital S maintained that the Health Department should publish the final score achieved by all the Catalan hospitals during the two processes in 2007-2008 and 2013-2014 to promote higher transparency and facilitate benchmarking practices. The Medical Director recognised that perhaps all the hard work reflected in the final score should be linked to their activity contract with the main purchaser of public health services to stimulate performance improvement:

> "I think the [Health] Department could do more about it [the outcome of the accreditation process]. First, I do not know if the Department has divulged any information explaining that certain hospitals have been accredited. Second, I do not know whether or not the Department is planning to do some kind of benchmarking because the whole point is being transparent (...) Everything should be more transparent and the Department should be the one making this information available (…) There is too much added value and hard work behind all this that it should be linked in some way to the contract. I would like to know the final score of other hospitals in Catalonia and I think that users

> [citizens] should have the right to know the score of the hospitals where they frequently have their appointments, etc. Transparency does not hurt and is a good way to improve (...). We [hospitals] all know each other very well so there should be no surprises".
>
> Medical Director, Hospital S (3-16-2)

The Human Resources Director of Hospital S (3-11-4) also shared this concern about comparing hospital performance indicating that there was "very little benchmarking and information sharing" across the entire healthcare sector. The accreditation process should allow hospitals to compare different performance indicators, share experiences across different healthcare organisations, and provide information to the citizens and other stakeholders to satisfy their increasing demands and expectations:

> "I hoped that this [accreditation] would allow us to share information and learn how to look at the indicators in order to have more transparency because I also believe that our society is stressing that need, right? Transparency is an important factor to show our numbers in terms of patients' visits, productivity ratios or clients' satisfaction with our services; because patients are increasingly more aware of different diseases and they now have mechanisms such as opinion and pressure groups to influence these processes. For that reason, hospitals need to be more transparent... and I have to say as well that all these things are becoming very trendy and fashionable"
>
> Human Resources Director, Hospital S (3-11-4)

Similarly, the Quality Manager of Hospital L (1-13-13) commented on the limited support offered by the Health Department during the first accreditation process in 2007-2008 arguing that it merely provided a workshop hosted by several experts involved in the design phase of the accreditation's standards. This brief session was primarily oriented "to clarify some doubts and worries, because nobody had a clue about the evaluation system". The Quality Manager recognised that the Health Department also had to deal with a number of conflicting political pressures and other government issues, but criticised the non-compliance of the Health Department with its own planned deadlines and lack of feedback mechanisms to enhance improvement actions and plans:

> "The only news we had from the Health Department were: 'you need to send me your improvement plan, the deadline for 'x' is going to be very soon, there has been a delay in...' No support at all and I would

> say that there were more obstacles than anything else, because they changed the standards many, many times (...). For example, they asked us for an improvement plan which we delivered in due time and they also asked us some questions related to our yearly improvement actions, but there was never feedback saying 'OK' to our improvement plan or 'OK' to our improvement actions. We only had a response related to our first improvement actions, nothing else. It seemed as if our improvement plan in 2008 meant nothing to them"
>
> Quality Manager, Hospital L (1-13-13)

6.3.3 Summary of findings on Research Question 3

This section presented the findings related to the use of the accreditation system and the enabling/coercive features of control. Two divergent and sometimes opposing discourses primarily related to the 'transparency' features of the system emerged from the data analysis. On the one hand, the use of accreditation was perceived as an enabling instrument supporting better leadership and management involvement, greater teamwork, and enhanced external collaboration with other organisations. On the other hand, the use of the accreditation system was portrayed as a coercive tool due to limitations of access to information, poor communication and engagement amongst the different hierarchical levels, the top management nature of the accreditation process, and the limited support provided by the government. Overall, the coexistence of coercive and enabling features in the use of the accreditation resulted in mixed views towards the system, particularly from middle & lower levels in the two hospitals.

In the context of the findings presented on research questions 2 and 3, the next section details the different attitudes (positive, negative, ambivalent) of management towards the accreditation system.

6.4 Research Question 4: Attitudes of management towards the accreditation system

This section addresses the fourth research question: *What are the attitudes of management towards the accreditation system and the triggers of those attitudes?* Findings are presented based on the enabling and coercive features incorporated in the 'design' (Section 6.2) and 'use' (Section 6.3) of the system under the theme

headings of (i) positive attitudes, (ii) negative attitudes, and (iii) ambivalent attitudes where interviewees views of the accreditation were simultaneously positive and negative.

6.4.1 Positive attitudes towards the accreditation system

Findings present a largely positive view regarding attitudes towards the accreditation due to the enabling features incorporated into the design and use of the system. Positive attitudes were driven by the five enabling 'design' features of the system described in Section 6.2.1 and the three 'use' enabling features illustrated in Section 6.3.1 (see Table 6.4). Findings are also consistent with the positive and beneficial role of accreditation as a 'driver for change', benefactor of the move from quality assurance to quality improvement, and catalyst for enhancing efficiency through cost reduction and quality improvement.

Table 6.4 Design / Use enabling features driving positive attitudes

Design features	Use features
- Self-assessment tool [Repair] - Comprehensive and integrated view [Global transparency] - Feedback channel [Global transparency] - Freedom to select auditing firm and contest auditors' recommendations [Flexibility] - Evaluation of non-essential standards [Flexibility]	- Leadership [Internal transparency and Global transparency] - Teamwork [Internal transparency and Global transparency] - External collaboration [Global transparency]

As previously described in Chapter 5, there was also a broad consensus among interviewees that the accreditation system was a helpful instrument for the simultaneous management of quality improvement and cost reduction despite the fact that sometimes the relationship between cost and quality was not completely tangible or measurable. Efficiency improvement could be achieved as a result of the focus of accreditation standards on the decrease of medical errors, reduction of adverse effects and better management of unnecessary costs. Developing clinical protocols and revising medical processes and integrated care pathways promoted better configuration of systems that could lead to a decrease in consumption of material for surgical activities.

Additionally, there were other aspects driving positive perceptions beyond what was captured in the enabling design/use features of the accreditation system such as the objective analysis and professionalism of surveyors or auditors. The Quality Coordinator of Hospital S (3-9-9) referred to the accreditation process as a constructive experience that enabled them to compare their performance against other hospitals of similar size. He also pointed out that several comments made by the surveyor during the final audit helped them to identify some underdeveloped areas, but "always without using specific references or the hospitals' name". This view of professional and competent surveyors was clearly articulated by the Nursing Director of Hospital L (1-16-15) using the following quote:

> "I can say that they [surveyors] were excellent. For example, one of them was a former nurse and she knew really well everything related to care processes and nurses' jobs. If during the audit, she [surveyor] asked something of a nurse and that nurse could not answer back because she was busy with a patient, there was not a problem at all. She knew well our profession's troubles. In the past, sometimes, we felt under pressure [during audits]"
>
> Nursing Director, Hospital L (1-16-15)

The surveyor of the auditing firm (A-1-1) also described the overall experience as "very positive" because it encouraged strong collaborative links both internally and externally. There was a positive perception in the two hospitals that the accreditation process enhanced teambuilding and multidisciplinary cooperation between different hospital departments due to characteristics associated with its enabling use. Professional development, interdisciplinary work and sharing of best practice also qualified as features of the driver for change role of the accreditation previously described.

6.4.2 Negative attitudes towards the accreditation system

Findings in this section detail interviewees' negative attitudes towards the accreditation system. These were found to be related to the coercive features of 'design' (Section 6.2.2) and 'use' (Section 6.3.2) described earlier (see Table 6.5 in the following page).

The restrictive and regulated nature of the accreditation process was the main driver of the negative attitudes towards the 'design' of the system. The accreditation

system was viewed as a bureaucratic mechanism used by the government to evaluate hospitals' performance based on mandatory command and control directives. Standards included in the accreditation manual were seen as capable of reducing organisational flexibility and interviewees perceived that the system limited the use of their own judgement to deviate from existing rules in the context of contentious situations. The actual model based on 'one size fits all' approach (Sax and Marx, 2014) did not reflect the dissimilarities across different types of hospitals. This view was particularly evident in Hospital L where, for example, the Quality Manager (1-13-13) maintained that a tertiary, university and high-technology hospital like Hospital L could not be assessed in the same way as a rural or small regional hospital.

Limited transparency had also a negative effect on the 'use' of the accreditation system. Dissatisfaction and disapproval were frequently used to describe situations associated with restricted access to information and poor or insufficient communication channels (both internally within hospital departments and externally with the Health Department). The level of understanding that hospital staff had about the broader system in which they operated was low because information regarding the accreditation was used in a way that only facilitated comprehensive information at the level of the top management team. Staff performed their individual tasks related to accreditation without being aware of the strategies and objectives followed by their organisations. Knowledge was exclusively limited to their working area.

Table 6.5 Design / Use coercive features driving negative attitudes

Design features	Use features
- Limited autonomy for changes [Repair] - Restricted opportunities to express opinions [Repair] - 'One size fits all' approach [Flexibility]	- Restricted access to information [Internal transparency and Global transparency] - Poor communication with lower levels [Internal transparency] - Top management tool [Global transparency] - Insufficient support and feedback from the Health Department [Global transparency]

In addition to the coercive features of the system, other factors also triggered negative attitudes towards the system. Tessier and Otley (2012) argue that the *'presentation'* of controls influences perceptions and attitudes towards controls. This was supported in this study and findings showed that criticisms of a number of deficient and inadequate characteristics of the system's design led to negative attitudes towards the system. Expressions such as "some indicators were hard to understand" (Technical Services Director of Hospital S, 3-15-5) denoted some of the difficulties experienced by interviewees during the first accreditation process in 2007-2008. For example, the Economic Management Manager of Hospital L (1-10-10) portrayed the accreditation manual as "a brick" and the Excel self-assessment instrument as a "non-user friendly tool" with deficient graphic features and incomprehensive coding system. The following quote describes his frustration with some technical and visual aspects related to the self-assessment tool:

> "Mentally it is impossible because it has no clear coding. For example 9c-4b-E… what does it mean? Someone needs to explain to you its meaning because it doesn't make any sense (…) There are hundreds of tools with better graphics and software… with a drop-screen where you can see the economic objectives, their standards and descriptions, etc. I had to download a file tree program software to visualise the information because it was impossible to deal with it"
>
> Economic Management Manager, Hospital L (1-10-10)

Similarly, the surveyor of the auditing firm (A-1-1) commented that some indicators such as the 'availability of the clinical history records' (standard 9c-02-07-01-E) and the 'rate of nosocomial wounds' (standard 9c-01-03-11-E) were often misunderstood by hospitals because the definitions and descriptions in the manual were deficient. First, the standard related to 'availability of clinical records' was commonly misinterpreted by the majority of hospitals in Catalonia because they assumed that clinical records were still produced in traditional paper layout rather than in digital format. Hospitals' interpretation of the standard 9c-02-07-01-E was mistaken because achieving 100% availability of clinical records in hospital, outpatient and emergency care was impossible in practice. Second, the surveyor indicated that many hospitals failed to properly measure the 'rate of nosocomial wounds' (total number of infections divided by total hospital stays) because they failed to use the 'real' number of clients with ulcers as the numerator and the

'potential' number of days in bed as denominator. Poor description of this standard was viewed by participants in both hospitals as the main reason for inaccuracies and inconsistencies in this indicator.

Some interviewees also believed that the Health Department should be more responsive and organised to manage the continuous changes in the accreditation standards and deadline failures to comply with their own targets. The Medical Director (1-15-6) and the Quality Manager (1-13-13) of Hospital L commented on the difficulties caused by the late incorporation of standards:

> "I think that the [Health] Department should have prepared these things in advance (…). If they planned to begin the audits in the second semester of the year, everything should be prepared in December"
>
> Medical Director, Hospital L (1-15-6)

> "Some standards changed partially or completely, the codification changed so I had to change all the Excel tables created previously, etc. (…) The self-assessment tool was delivered too late and three months before our [final] self-assessment they included new standards [178 out of 696 essential standards]"
>
> Quality Manager, Hospital L (1-13-13)

An additional reason why accreditation was perceived as negative beyond the coercive features of the design and use of the accreditation system was the time-consuming nature of the activities and significant amounts of hard work and resources involved in the entire process. Although the evaluation of some accreditation standards coincided with certain activities related to "everyday practices" (Deputy General Director of Hospital L, 1-14-14; Nursing Director of Hospital S, 3-14-3), interviewees believed that countless hours of dedication were needed to fulfil the accreditation requirements. The Nursing Director of Hospital S (3-14-3) used the following words to describe this situation:

> "You get overwhelmed when you see the number of standards. We also have our day to day activities, which means that we need more time to revise and create new protocols, etc. (…) The main problem is that you have to read them all [standards] and ensure that they are still operational. If you do not have staff doing this, it is complicated"
>
> Nursing Director, Hospital S (3-14-3)

Interestingly, increased flexibility by means of evaluating non-essential standards was previously described as an 'enabling' feature of the system (Section 6.2.1), but not all the interviewees perceived this as positive. In fact, it was viewed as negative because it was associated with extra work and was time-consuming. Although non-essential standards were designed as a continuous improvement element of the accreditation system, hard work and additional resources were needed to evaluate them:

> "We are quite busy with our daily jobs that analysing 700 extra standards [non-essential] is out of our mind. Maybe large hospitals with more resources in terms of staff can spend time to do it"
>
> Quality Coordinator, Hospital S (3-9-9)

This hard work was also related to a belief amongst interviewees that the current design of the accreditation system needed more incentives and recognition to support good performers. The Medical Director of Hospital S (3-16-2) argued that a first-class final score for the accreditation process should be used as a rewarding mechanism or "corrective factor" to improve, for instance, the 'contract' conditions signed with the Health Department in order to perform more activity via funding of a higher number of clinical operations and medical procedures. The General Director of Hospital S (3-19-1) maintained that "efficient" hospitals with higher scores should be rewarded with the ability to provide more healthcare services because of their enhanced performance:

> "If you do things better than others, then you should be treated differently. If you do things with more quality and less costs meaning you are more efficient, it should be recognised by the insurer CatSalut [public services purchaser]"
>
> General Director, Hospital S (3-19-1)

Similar limitations were also echoed by the Quality Manager of Hospital L (1-13-13) who pointed to the limited assistance and gratitude shown by the Health Department to recognise the hard work of all the Catalan hospitals to improve the overall standards of the hospital sector.

> "We have been working really hard following a tight schedule (…). In the end, the only thing that matters is the 'number' [final score] because the 'process' counts for nothing… well, at least I have the personal satisfaction of trying my best! From time to time, it is nice when others

> [Health Department] give you a pat on the back and appreciate your work (…). Some kind of recognition is needed because it seems that scoring 81 or 95 is exactly the same thing"
>
> Quality Manager, Hospital L (1-13-13)

She was concerned that the final score achieved at the end of the accreditation process was the only relevant indicator to attain the 'accredited' status.

Even though limited autonomy for changes and restricted opportunities to express opinions were portrayed as coercive features of the system (Section 6.2.2), not all the interviewees perceived these as negative. There was a certain *acceptance* of the necessity of these attributes based on the fact that the accreditation was an externally imposed system designed with rigid and inflexible characteristics. Thus, it could be argued that this was perceived as neither positive nor negative, but rather "neutral" compliance with a mandatory system. The following quote from the Human Resources Assistant Director in Hospital L (1-1-1) showed how he did not perceive the system as coercive but rather just as 'the way it is':

> "For example, next week we have the accreditation (…). Everything is 'protocolised' [making a protocol of] … healthcare and non-healthcare activities. Here, at the Human Resources department, we have many protocols. Why? Well, because it is essential… and can we say that it is a coercive situation? Well, there are protocols that need to be followed and it is clear that it is the only way to be organised and do things properly"
>
> Human Resources Assistant Director, Hospital L (1-1-1)

Similarly, a coercive 'use' feature such as restricted access to information was not perceived negatively by all interviewees. For example, the Medical Director of Hospital S (3-16-2) did not see it as a truly constraining or problematic issue because top management in Hospital S knew each other really well and worked together as a team for a long time. He recognised though that the same situation in a larger hospital could be negative.

Thus, findings from Sections 6.4.1 and 6.4.2 reveal a complex picture showing a mix of positive and negative attitudes by management towards the accreditation system. The next section describes situations in which participants perceived the accreditation system as simultaneously positive and negative.

6.4.3 Ambivalence towards the accreditation system

The previous sections identified the drivers of positive and negative attitudes towards the accreditation system based on mainly the enabling and coercive features of the system. What is striking about these findings is that positive/negative perceptions coexisted simultaneously rather than reflecting a difference between some individuals viewing the system positively and other individuals viewing the system negatively. The coexistence of these attitudes indicates an 'ambivalent' orientation of hospital staff towards the accreditation system. Findings presented in this section captured this 'collective' ambivalence of management using quotes from the interviewees where positive and negative effects were perceived at the same time within their answer to one specific question.

Accreditation was viewed as an external mandatory control instrument that combined characteristics related to compliance and regulation (i.e., quality assurance) with opportunities for organisational engagement and collaborative learning (i.e., continuous quality improvement). The role of accreditation as a facilitator for quality assurance and continuous quality improvement was seen by interviewees as a mechanism that integrated both coercive and enabling features leading to negative and positive attitudes towards the system. For instance, the Economic & General Services of Hospital S (3-13-7) perceived accreditation as a "necessary inconvenience" which resonated with the "necessary evil" term used by Adler and Borys (1996) to describe coercive systems and used by Sewell (1997) to portray healthcare accreditation. The Economic & General Services Director perceived accreditation as a coercive mechanism because it 'forced' them to revise protocols and processes, but with a positive element due to its continuous quality improvement features:

> "The major inconvenience is the hard-working effect. It is a necessary inconvenience because you have to revise things, but it is an *advantageous inconvenience*. In your day to day activities you have to do it anyway, but the accreditation makes you reflect, review, revise, etc. Revising and reviewing things such as this new plan I had to do [the Economic Management Plan] represent having less time in your daily activities, but I see it [accreditation] as a *necessary inconvenience* (...) The accreditation has forced us to revise all these things (i.e., protocols, circuits, plans) and, in the end, it means improvement"
>
> Economic & General Services Director, Hospital S (3-13-7)

The Economic & General Services Director used again the verb 'force' to denote the obligatory aspect of the accreditation and noted that some of its contents were to some extent slightly repetitive and could have been integrated in a better way. However, the accreditation model was perceived once more as a constructive mechanism due to its features which led to improvements:

> "I found the accreditation a little bit repetitive, i.e., a similar item was repeated a few times by incorporating small changes or more specific details. What do I mean by that? The accreditation forced us to review processes already in place, but it made us realise that revising specific things point by point helped us to improve. Maybe we were used to doing things in a particular way and the accreditation told us to do the same thing in a slightly different manner. Afterwards we understood that the accreditation was a better approach to revise pathways, processes, plans, protocols, etc."
>
> Economic & General Services Director, Hospital S (3-1-3-7)

The Customer Services Director of Hospital S (3-6-6) referred to the accreditation system with mixed feelings due to its inquisitive and intimidating negative character but also its positive improvements on results. She described the role of the Health Department as 'Big Brother' with the intention of supervising the performance of the network of Catalan hospitals and guarantying that hospitals followed standardised and organised procedures:

> "My first thought when someone talks about the accreditation is 'Ugh, it gives me the creeps!', but honestly when you use it and you see good results, then you realise it is worth the effort (…) I believe that we needed orderliness in our hospitals. Everyone is conscious that we must work in an organised way and so on, but sometimes you need someone from outside [the Health Department] watching over you to make sure that everything is reliable"
>
> Customer Services Director, Hospital S (3-6-6)

Organisational change processes like the hospital accreditation system were also seen by some interviewees as an instrument that combined enabling and coercive features in relation to 'repair' and 'flexibility' aspects. For instance, the Human Resources Director of Hospital S (3-4-4) showed her support for the accreditation system, but she argued that the inflexible nature of the accreditation could reduce the freedom, autonomy and capacity of employees to exploit innovation and creativity to improve hospital issues:

> "I am in favour of having these mechanisms [accreditation system] because they help you in some way to improve processes and indicators, but sometimes they are too structured that they unfortunately restrict people's capacity to have their own initiatives and different points of view (...) I think that having standardised things is fine, but without disregarding new market demands or environmental changes and do not limit ourselves because the accreditation or the model says so. I believe that sometimes having too much structure limits somehow other things more related to innovation, creativity, looking at different approaches and having an open mind to say: what will happen if we do things differently?
>
> Human Resources Director, Hospital S (3-4-4)

Although hospital accreditation was perceived as a comprehensive performance assessment tool of almost 700 essential standards integrated across the three dimensions of structures, processes and results, interviewees recognised the imperfections and limitations of the current model:

> "They [Health Department] could have selected a system with better visual features. Sometimes I ended up putting things in the wrong cells [Excel document]. I spent too much time dealing with these things (...) Once you read it [standards manual] and after looking at all the aspects, however, you can see that it really covers everything. Things are explained properly…, but it is not easy to understand for people who are not familiar with the whole picture. Maybe my boss [Economic & Finance Director] is able to do that because he knows the system well and he can explain it to me, but I think that just a few people have a clear picture of what exactly the accreditation means"
>
> Economic Management Manager, Hospital L (1-10-10)

Furthermore, the Quality Coordinator (3-18-9) of Hospital S indicated that other alternatives approaches, particularly in the 'results' dimension, could have been used to analyse the performance measures. His words pointed to the enforcement nature of the accreditation in its attempt to drive similar performance across the network of hospitals bearing in mind the complexity of the healthcare sector:

> "It [accreditation] forces us to have a certain type of methodical work based on procedures, analysis of results, dashboards and indicators. Thus, it is interesting because we all move in the same direction. In the 'results' area there are certainly other options available, because our kind of activity [hospital services] is varied and wide-ranging leading to a large number of performance indicators. The most care-driven [indicators] are probably the least captured in the model due to the fact that they are the most difficult to collect (...) For instance, registering

> patient satisfaction of certain surgeries in a proper way is not easy because it is not performed in a systematic way (…) It is also complicated because current systems related to medical history records do not allow it (...) and it generates too much work. We do it now with some indirect indicators, for instance, analysis of complications (...) but there is still a long way to go"
>
> Quality Coordinator, Hospital S (3-18-9)

Changes in perceptions between the accreditation processes in 2008 and 2013 were also captured by the Technical Services Director of Hospital S (3-5-5) when recalling the benefits of increased knowledge associated with learning curve approaches like the accreditation system. While the first process in 2008 caused significant hard work and stress due to a learning curve, the second process or 're-accreditation' was perceived as more positive and constructive because participants knew how to use it and appreciated its potential advantages, particularly in the 'results' area:

> "The first time everything was created in a hurry and we had to start from scratch. It generated lots of work because we had much less knowledge than we have now. We experienced it as burdensome, hard work and something that had to be done because it was obligatory, but you can see now that many things make sense and you find it useful. You see things that help you, but sometimes you see other things that don't, but overall I view it as a very positive thing, especially with regards to 'results'. Registering 'results' on a regular basis has forced us to do tests with the same frequency (…) In the end, when you do some analysis like this [accreditation] you always see new things to be done, things that need to be improved, things that are no longer needed or perhaps things that we need to do in a different way. I appreciate it now more positively than the first time"
>
> Technical Services Director, Hospital S (3-5-5)

Additionally, the economic climate influenced the perception of individuals towards the accreditation process. The Nursing Director of Hospital S (3-14-3) argued that in the current climate employees were not very open to managerial ideas and proposals because of the difficult economic situation experienced by the hospital. They had to re-negotiate a new contract with the main purchaser of public healthcare services, which resulted in a considerable reduction of hospital activity that negatively affected staff salaries and their working conditions. In addition, the accreditation process in 2007-2008 was evaluated at the end of a booming and

prosperous period whereas the accreditation process in 2013-2014 occurred during a period of recession and austerity. The Nursing Director of Hospital L (1-16-15) pointed to the current difficulties of motivating the nursing teams despite her satisfaction in achieving a high accreditation score in 2013-2014 based on the high commitment of the nursing staff. Financial cutbacks, job losses and reductions in salaries have caused certain negative attitudes:

> "Nowadays we have a real worrying factor which is the demotivation of our [nursing] teams due to external economic problems. The past four years have been really difficult. We put too much pressure on them [teams] to achieve good results and we have achieved almost 95% which it is very close to the excellence rate. We are now trying to motivate them, let's see!"
>
> Nursing Director, Hospital L (1-16-15)

Overall, this section described different situations where hospital staff revealed both positive and negative attitudes towards the accreditation system due to the combination of enabling and coercive features integrated in the design and use of the system.

6.4.4 Summary of findings on Research Question 4

Findings on the consequences of enabling/coercive features of the accreditation have been classified and presented in terms of positive, negative, and ambivalent attitudes of management towards the system. Findings indicate that in most cases there is a high correlation between enabling/coercive features and positive/negative perceptions. In general, enabling features related to the accreditation 'design' and 'use' stimulated positive attitudes and coercive features associated with 'design' and 'use' of the accreditation were perceived negatively by interviewees. However, in some situations, enabling features such as increased flexibility (i.e., evaluation of non-essential standards) and increased transparency were not perceived positively and coercive features such as limited autonomy and restricted opportunities to express opinions were not perceived negatively. The way accreditation information was presented (i.e., poor graphical features, last-minute changes from the Health Department) also had a negative impact on interviewees' attitudes towards the system. Finally, some individuals had simultaneous positive and negative perceptions and the triggers of these ambivalent attitudes were discussed.

6.5 Overall summary of chapter

This chapter presented the perceptions of management towards the accreditation system using the theoretical lens of the enabling/coercive formalisation framework (Adler and Borys, 1996) in the context of external controls in a public sector setting. The chapter was divided in three sections in order to answer research questions 2, 3 and 4. Findings showed that the accreditation system in Catalonia was designed by the Health Department and used by management in hospitals in both enabling and coercive ways. The first section (Section 6.2) presented findings on the 'design' features of the accreditation system based on the interviewees' perceptions of the system. Management pointed to the coexistence of a number of enabling and coercive features. While they identified a number of elements such as the self-assessment tool, the comprehensive and integrated view, feedback channels, freedom to select auditing firm and evaluation of non-essential standards as enabling features of the system; they pointed to limited autonomy for changes, restricted opportunities to express opinions and the 'one size fits all' approach of the accreditation as coercive features of the system. In the second section (Section 6.3), findings provided insight into the different views of management with regards to the 'use' of the system. Similar to the findings on design, the use of the accreditation was found to display both enabling and coercive features. On the one hand, leadership and top management involvement, teamwork and external feedback were perceived by interviewees as enabling features of the accreditation. On the other hand, perceived coercive features related to limited access to information, poor communication with lower staff levels, the managerial nature of the tool, and the limited support and feedback offered by the Health Department.

Section three (Section 6.4) focused on the attitudes of management towards the system. Overall, there was a high correlation between *enabling* 'design' and 'use' features (summarised in Table 6) and *positive* attitudes and also between *coercive* 'design' and 'use' features' (summarised in Table 7) and *negative* attitudes. However, a few exceptions were also noted where enabling features led to negative attitudes and coercive features led to positive attitudes. In addition, some interviewees experienced the simultaneous presence of both positive and negative attitudes as a result of the mix of enabling and coercive features. This situation gave rise to an ambivalent orientation towards the healthcare accreditation system.

CHAPTER 7: DISCUSSION OF FINDINGS

7.1 Introduction

This chapter discusses the findings reported in Chapters 5 and 6 in the context of the literature reviewed in Chapters 2 and 3. The discussion is structured around the following three issues: (i) the role of the accreditation system; (ii) the enabling/coercive formalisation of the accreditation system; and (iii) the attitudes of management towards the accreditation system.

The first section provides a discussion regarding the findings in Chapter 5 and reintroduces the first research question. The second section discusses the findings in Chapter 6 related to the enabling/coercive formalisation framework (second and third research questions). Finally, the third section discusses further findings in Chapter 6 on management attitudes towards enabling/coercive formalisation with the aim of answering the fourth research question.

The findings presented in Chapters 5 and 6 sought to answer the following four research questions presented in Chapter 1:

> RQ 1: What is the role of the accreditation system?
>
> RQ 2: How enabling/coercive is the design of the accreditation system?
>
> RQ 3: How enabling/coercive is the use of the accreditation system?
>
> RQ 4: What are the attitudes of management towards the accreditation system and the triggers of those attitudes?

7.2 The role of the accreditation system

This section provides a discussion regarding the first research question: *What is the role of the accreditation system?* This discussion integrates the findings with prior literature related to NPM, performance measurement in the context of healthcare and healthcare accreditation.

7.2.1 Accreditation as a NPM tool

Over the past twenty years, the adoption of performance measurement frameworks (PMFS) such as accreditation systems by regulators in public health systems has intensified (Hood, 1995; Lapsley, 1999; Hughes, 2003; Modell, 2004; Jansen, 2008; Cuganesan and Lacey, 2011; Mariani and Tieghi, 2016). The accreditation system was introduced in the Catalan healthcare sector as a performance measurement tool attempting to improve the effectiveness, efficiency and accountability amongst public services. It also reflected engagement with the NPM movement from a traditional PMS rooted in input-oriented features to a more balanced and comprehensive PMS which combined financial and non-financial indicators (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009). As noted earlier, the types of performance measures adopted in public sector organisations are primarily affected by regulatory pressures (Lachmann et al., 2016). In this study, the regulator aimed to drive performance improvement on multiple dimensions through the extensive collection of performance measures comprising the accreditation system.

Findings support the greater emphasis on economic rationality promoted by NPM reforms and display particular features of the accreditation system which are aligned with a 'mechanistic notion of performance' (Speklé and Verbeeten, 2015) by way of increased efficiency, greater accountability and extensive use of performance measurement targets to direct the attention of managers towards the goals enforced by the government. In other global contexts where new performance measures were introduced with the intention of improving hospital management they were not adequately linked into hospitals' management systems (Mesabbah and Arisha, 2016). However, in this study, compliance with accreditation requirement for some of the extensive number of performance measures necessitated collaboration, opened a dialogue and resulted in exploration of performance improvement opportunities.

The power exerted by the Health Department on the public hospitals is reflected in the criticality of exceeding a minimum number of accreditation standards in order to secure a contract. Simultaneously, the analysis of the accreditation system shows evidence of higher transparency in the use of information channels that encourage

greater teamwork and collaboration. This motivates managers to achieve common goals and overcome the negative effects often created by the restrictive and bureaucratic nature of formalised processes (Cuganesan et al., 2014).

A higher emphasis on a more balanced and comprehensive approach and the importance of outputs and results (Jansen, 2008) seems to reinforce as well a global discourse of modernisation and institutional pressures (Hyndman et al. 2014). For example, the institutional context of Catalonia supports an accreditation system based on an overall performance 'index' and 'non-failure'. To date no hospital has failed to pass the accreditation process. If a hospital fails, this would lead to the discontinuation of its operations and it would cause a situation in which other hospitals would have to absorb and deliver its services, which could have detrimental consequences on the overall dynamics of the healthcare system. The level at which the Catalan Health Department set the overall performance target to be achieved for the re-accreditation process in 2013-2104 (65% pass rate) indicates a concern with quality improvement (in 2007-2008 the required pass rate was 60%) coupled with a need to ensure that all hospitals pass. A more aggressive performance target such as 85%-90% pass rate could result in some hospitals facing difficulties to meet compulsory quality targets.

There is also a view in the NPM literature that many public sector organisations have endeavoured to develop targets that cover all aspects of an organisation's performance (Hyndman and McGeough, 2008). This is understandable in the particular case of Catalonia as the government imposes on hospitals the measurement of almost 700 compulsory standards (and also recommends to evaluate 600 voluntary standards because a large number of them are likely to be incorporated as compulsory standards in the next re-accreditation process), which virtually integrates all the organisational aspects. However, this comprehensive and holistic approach has the potential for information overload, particularly for 'medical' and 'nursing' management staff because the majority of the standards evaluated in the 'process' dimension of the accreditation assessment (295 out of the 696 total standards) are related to clinical aspects. For example, prior psychological research suggest that individuals have real difficulties in managing more than seven measurements at the same time (George, 1956). In the context of a similar and comprehensive management tool like the Balanced Scorecard, a number of studies

reveal that when individuals are asked to evaluate many initiatives simultaneously, there is a high potential for failure as human beings are only capable of focusing on a relatively small number of performance indicators (Malina and Selto, 2001; Zeng and Luo, 2013). Despite views that the system becomes inflexible and onerous due to the large number of standards, it is also perceived as a valuable tool for measuring performance and introducing organisational changes because effectively integrates the inputs/processes/outputs (or structures/processes/results in the terminology of accreditation) of hospitals as reflected in the two previous chapters.

Similarly, several academics and scholars have also questioned the effectiveness and usefulness of accreditation programmes arguing that a large number of healthcare professionals perceive hospital accreditation as a bureaucratic and laborious mechanism unable to enhance quality services due to the large number of quality standards that need to be evaluated (Pomey et al., 2004; Greenfield and Braithwaite, 2008; Touati and Pomey, 2009; Alkhenizan and Shaw, 2012; Jaafaripooyan et al., 2014; Ng et al., 2014). This resonates with the recurring NPM criticisms related to a limitation of autonomy and freedom due to task overload, and higher de-professionalisation of individuals due to standardisation of processes (Adcroft and Willis, 2005; Bifulco, 2011). While findings in this study suggest that management did experience certain aspects of the accreditation system as laborious and bureaucratic, they predominately referred to the benefits of accreditation and were accepting of the logic behind a drive towards standardised processes. Of course, of particular relevance here is that interviews were held with management rather than medical staff and Touati and Pomey (2009) point out that management staff are more favourable to standardised processes than medical staff.

In addition, a common concern in the literature is that although more integrated and multifaceted approaches tend to assist and facilitate decision-making activities, financial and quantitative assessments still disregard the quality facet of services since qualitative performance measurement is more difficult to evaluate (Vaivio, 1999; Kloot and Martin, 2000; Pollitt, 2006). This is also the case of the Catalan accreditation system since many of the standards related to the ‘results’ dimension (described in Chapter 5) are focused on efficiency measures with strong financial emphasis on the interplay between cost reduction and quality improvement. This line of argument reinforces the viewpoint of Verbeeten (2008) who argues that the

challenge for many PMSs is to find a balance between short-term financial performance targets and qualitative information characterised by long-term or strategic performance objectives.

Although a key characteristic of NPM is to provide higher transparency for the public sector (Hood, 1995; Lapsley, 2008), the Health Department in Catalonia has made little effort to provide external transparency on the performance of accredited hospitals to citizens and even to the network of public hospitals (as indicated by the Medical Director of Hospital S in Chapter 6). There is a lack of published comparative information to better understand the overall performance of the hospitals in terms of accreditation results. Despite the fact that citizens should be considered as owners of the state, their ownership remains rather symbolic as their involvement is practically passive and inexistent.

Furthermore, country context is important when comparing findings in NPM studies. Findings in this research point to a greater overall acceptance of the NPM philosophy (similar to the Finnish context) compared to other contexts like the U.K. (Kurunmäki et al., 2003; Kurunmäki and Miller, 2011). For example, interviewees did not question the appropriateness of a vast array of metrics to evaluate quality in a context where quality of clinical care comprises many immeasurable elements. This may be explained by historical background of the Catalan system and also by the fact that the vast majority of managers in Catalan hospitals hold a degree in medicine or a related discipline and a MBA degree, which increases their familiarity with management practices and methods developed in the private sector emphasising the importance of contract relationships, hands-on top management, resource savings, and efficiency. The Catalan healthcare system has always integrated a mix of public and private governance of hospitals and was the forerunner for the introduction of the accreditation system in the European context. While the importance of this in explaining differences between Catalan accreditation and U.K. accreditation can only be speculated on, it is likely to be an important factor in comparing Catalonia to other regions in Spain as the vast majority of Spanish regions have historically developed healthcare systems which rely heavily on the provision of services by public hospitals rather than private hospitals.

7.2.2 Accreditation as a 'driver for change' and 'hybrid' model

Also consistent with existing literature, findings in Chapter 5 revealed that public hospitals were regarded as complex organisations due to their multiplicity of stakeholders and objectives (Abernethy et al., 2007; Eldenburg and Krishnan, 2007; Cardinaels and Soderstrom, 2013). Cost objectives and reductions in efficiencies were behind government efforts targeted at ensuring the sustainability of modern healthcare systems (Lehtonen, 2007; Chapman et al., 2014). However, quality of care was also of paramount importance in hospitals and hospital accreditation was an illustration of a large-scale programme designed to provide assurance on a minimum standard of quality of care and patient safety (El-Jardali et al., 2008; Greenfield and Braithwaite, 2008; Pomey et al., 2010).

The hospital accreditation in Catalonia was designed as a regulatory and compulsory tool similar to France (Pomey et al., 2005; Touati and Pomey, 2009) in order to provide assurance that certain standards of quality of care have been met, as was evident in Chapter 5. Standards were seen by interviewees as a prescriptive mechanism required by law and necessary to guarantee a 'contract' with the main purchaser of public health services (CatSalut). However, the introduction of the new acute care hospital accreditation programme in 2006 showed clear signs that the system has morphed into a quality improvement tool based on the principles of excellence of the EFQM model. A strong emphasis on the 'inputs-processes-outputs' framework based on the analysis of hospital 'structures', internal and external 'processes' and 'results' has helped hospitals to carry out activities promoting continuous quality improvement.

This finding on a move from 'quality assurance' to 'quality improvement' is consistent with previous findings on healthcare quality management (Adler et al., 2003) and hospital accreditation (Pomey et al., 2004; 2010; Touati and Pomey, 2009). For example, improvement activities related to the development and redesign of organisational plans helped to upgrade clinical processes and signalled opportunities and weaknesses where further action was required. This process promoted close collaboration between different departments to revise and update protocols and performance indicators. Thus, the extent to which accreditation has changed the functioning of hospitals was useful for understanding the role of

accreditation as a 'driver for change' tool (Cooper et al., 2014) promoting changes in clinical processes and activities of the hospitals (Pomey et al., 2004, 2010; Greenfield and Braithwaite, 2008; Alkhenizan and Shaw, 2011; Greenfield et al., 2012; Hinchcliff et al., 2012). Interviewees perceived standards not only as an administrative 'box ticking' exercise (Ahrens and Khalifa, 2015) enforced by the government, but also as an improvement management tool that was used as an internal device aimed at delivering higher performance by means of developing feedback channels and higher collaboration between departments.

The combination of attributes related to quality assurance and quality improvement of the Catalan model also resonates with recent calls made in the healthcare accreditation literature to examine appropriate levels of rigidity/flexibility (Greenfield et al., 2013) within accreditation programmes. Hospitals face a complex situation in managing a highly formalised and bureaucratic system to simultaneously achieve mandatory quality objectives and also provide a certain level of flexibility to adapt organisational structures and incorporate latest clinical practices and medical knowledge. This requires managing government's demands while providing employees with some degree of autonomy and flexibility to achieve the accreditation's objectives, despite the fact that hospitals had limited scope to do this.

This compromise in terms of 'rigidity or flexibility' within accreditation programmes (Ahrens and Khalifa, 2015) was also pointed to by Greenfield et al. (2013) as a current challenge faced by healthcare organisations. They referred to Touati and Pomey's (2009) study to illustrate how different accreditation programmes could demonstrate rigid and flexible elements at the same time. Touati and Pomey (2009) found that French (compulsory programme) and Canadian (voluntary programme) accreditation programmes incorporated different features that seemed to be converging in a more 'balanced' approach as France tried to incorporate more voluntary features and Canada more obligatory requirements. This view was also supported by Shaw et al. (2013) who argued that many countries in the world were attempting to "strike a balance" (p.226) between a top-down inspection model (enforced by regulation) and a more 'collegial' approach based on education and continuous improvement.

A recent study by Greenfield et al. (2016) used the term *'hybrid'* model of accreditation to portray a system which encompasses both 'compliance' and 'quality improvement'. Greenfield et al. (2016) investigated three sectors of the Australian health system providing evidence that their accreditation programmes promoted the analysis of structures, processes and outcomes of care by using regulatory compliance with minimum standards and continuous quality improvement practices. Their findings indicated that the 'hybrid' model brought together the strengths of the two philosophies to enhance quality and safety standards for consumers. Similarly, findings in my study showed that the hospital accreditation system in Catalonia combined rigid (i.e., mandatory or essential standards) and flexible aspects (i.e., voluntary or non-essential standards) to manage quality standards. Hence, findings point to the convergence of the accreditation systems towards a mixed model that integrates both rigid and flexible elements. The Catalan model was seen by interviewees as a 'hybrid' model that embraced quality standards related to compliance (a measurement *'weapon'*) and continuous improvement (a management *'tool'*).

A further issue of relevance is the measurability of cost and quality in the healthcare sector. The implementation of performance measurement in healthcare can be problematic due to the unquantifiable character of some of the services provided and the uncertain link between long term effects and outcomes (Brignall and Modell, 2000; de Bruijn, 2002) as certain improvement outcomes can only be noticeable after numerous observations and statistical tests (Eddy, 1998). Part of this challenge also results from the different views and expectations among key stakeholders. In the particular case of healthcare accreditation, difficulties can occur because designers, users and observers have different expectations (Shaw, 2003b). The diversity of approaches to performance measurement (i.e., process-based vs. outcome-based approaches) and methods of capturing performance (i.e., people perceptions and experiences vs. objective indicators) detailed by researchers in the healthcare accreditation literature illustrate this challenge. For example, Øvretveit and Gustafson (2002) raised concerns about the challenging task of demonstrating causality between outcomes measures and quality improvement as a result of the accreditation system. The use of 'objective' indicators in accreditation programmes was also criticised by several researchers (Rooney and Van Ostenberg, 1999; de

Walcque et al., 2008) because many indicators were primarily oriented towards the evaluation of easier and sometimes less costly elements of the system (structures and processes) disregarding the practical implications and improvement properties (patients' outcomes) of these elements.

The intangible and heterogonous nature of the healthcare services provided by hospitals was also viewed by interviewees in my study as a complex topic. While the list of metrics included in the accreditation programme were seen as comprehensive, there was also a view that not all elements of healthcare systems could be quantified in metrics. This was particularly the case for quality which was regarded as more difficult to measure and less tangible than cost. Findings showed that many standards in the accreditation system were not only used to evaluate quality issues, but also incorporated indicators related to efficiency and cost management. This finding is consistent with a number of studies in the literature which indicated that enhanced efficiency and effectiveness of accreditation systems through quality improvement and cost reduction were one of the key principles of healthcare accreditation (Rooney and Van Ostenberg, 1999; Shaw, 2004). This was also consistent with Grepperud (2015) who indicated that many previous studies focusing on the benefits of healthcare accreditation programmes resulted in two 'endpoint benefits' valuable to society: cost reductions and output quality improvement. Similar to Grepperud (2015), findings in my study suggested that reductions in costs resulted from improved procedures and compliance with standards, encouragement of better use of resources, and lower failure rates in services delivered, and output quality improvement resulted from the added value of the services created or delivered and comprised all the quality features valued by customers such as clinical quality and facilities.

Additionally, findings supported the view that quality improvement and cost reduction were intertwined and complementary objectives and this was consistent with the growing pressure to deliver better quality services at lower costs (Kaplan and Porter, 2011; Cardinaels and Soderstrom, 2013; Häkkinen et al., 2014). While previous literature pointed to mixed findings on the relationship between cost and quality (Hussey et al., 2013), particularly in terms of ambiguity as to whether the two objectives were complementary, contradictory or incompatible with one another (Morey et al., 1992; Carey and Burgess Jr., 1999; Hvenegaard et al., 2011),

many interviewees in my study viewed cost and quality as complementary objectives which worked in tandem. Their perceptions on the intertwining of cost and quality objectives was supported by a review of the accreditation manual which provided evidence of actions directed to minimise errors and improve efficiency based on numerous surrogate measures which captured the close association between cost and quality (i.e., complications, readmissions, avoidable hospitalisations or average length of stay). For example, a reduction in the number of defects using medical procedures to decrease potential complications (i.e., replacement of catheter every 72 hours) could help to prevent infections and also to reduce failure costs as some medication could be very costly for hospitals. The process of continuously reducing variation using standardised processes could help to improve reliability, robustness and consistency over time leading to improvement on quality and reductions in costs. Similarly, a decrease in the rate of readmissions should reflect enhanced quality and lead to reduced costs. A potentially dysfunctional way to reduce readmissions would be to postpone discharges but this would result in an increase in the average length of stay indicator. Thus, an integrated and comprehensive list of metrics captured the importance of both cost and quality management.

Contrary to many prior accounting studies in the healthcare domain where *efficiency* concerns have been largely portrayed as a 'cost' aspect dealing with issues related to control and improved flexibility (Cardinaels and Soderstrom, 2013), my study used the accreditation system to support recent views of the importance and close association of 'quality' with efficiency improvements (Malmmose, 2015; Swinglehurst et al., 2015; Pflueger, 2015). The healthcare management literature and medical journals have long recognised 'efficiency' as one of the multiple components included in the definition of quality that examines the relationship between inputs (i.e., costs of labour, materials, etc.) and outputs & outcomes (i.e., average length of stay, quality adjusted life years) (Palmer and Torgerson, 1998). Findings in my study point to the importance of quality in evaluating efficiency challenges faced by hospitals.

Concerns have also been raised in the literature that a strategy of short term cost control was unlikely to be effective in improving quality (Goddard et al., 2000; Aidemark, 2001; Yuen and Ng, 2012). Yuen and Ng (2012) suggested that cost

management could also be used as a preventive strategy to control long term costs and argued that an overemphasis on cost reduction (a short-term strategy) relative to quality improvement (a long-term strategy) could cause detrimental consequences in the management of both cost and quality. Similarly, Aidemark (2001) pointed out that excessive focus on financial controls could negate quality improvements. Interestingly, findings in my study relating to the dominance of cost containment revealed that in many situations interviewees viewed cost as a long-term objective rather than a short-term strategy. This was contrary to previous research in healthcare pointing to a view of cost reduction as a short term strategy and quality improvement as a long term strategy (Naranjo-Gil and Hartmann, 2007). Findings in Chapter 5 provided examples where the costs of prevention associated with 'hand sanitation' or 'nosocomial infections' were used as a more future-oriented mechanism to reduce other costs and led to increased quality of care for patients. These findings supported the view that management of certain activities (i.e., reduction of length of stay, reduction of invoice errors) could improve quality while reducing costs (Does et al., 2010). It also reinforced the view that poor-quality of care could be costly (Moullin, 2002). Inexpensive quality-related activities such as ongoing revision of medical procedures and clinical pathways could help to control costs and enhance quality by reducing standards variability and increasing the capacity to fix errors resulting from, for example, the inappropriate implementation of surgical procedures.

7.3 Enabling and coercive formalisation

This section provides a discussion regarding the 'design' and 'use' of the accreditation system based on the enabling/coercive formalisation framework (Adler and Borys, 1996). It addresses the second and third research questions respectively: *How enabling/coercive is the design of the accreditation system?* and *How enabling/coercive is the use of the accreditation system?* Three sub-sections are used to discuss the relevance of the four features of the theoretical framework (repair, internal transparency, global transparency, and flexibility) in the context of my research: (i) differences between the four features related to enabling/coercive formalisation and my interpretation of these features, (ii) differences between

design and use of control systems, and (iii) suitability of the four characteristics for understanding external control systems.

7.3.1 Differences between the four features related to enabling/coercive formalisation and my interpretation of these features

My study relied on Adler and Borys' (1996) analysis of enabling and coercive formalisation. While the framework was originally intended for 'design' and 'implementation' of a system, the accounting literature has extended its applicability to examine the influence of enabling and coercive formalisation in relation to the 'use' of a system (Ahrens and Chapman, 2004). Adler and Borys (1996) suggested that depending on the type of formalisation managers were confronted with (coercive vs. enabling), their attitudes to control would differ. Coercive formalisation was characterised by formal detailed rules to enforce compliance and control employee behaviour whereas enabling formalisation referred to rules and guidelines encouraging employees to develop their own capabilities, respond effectively to uncertainties and facilitate decision-making (Ahrens and Chapman, 2004). In my study, the evaluation of quality standards by interviewees involved a certain degree of complexity because both enabling and coercive formalisation were incorporated in the accreditation system. While formalised processes and audit inspection were seen as essential requirements to improve quality standards and enhance higher collaboration and transparency, the accreditation was also perceived as capable of diminishing organisational flexibility and limiting adaptability to the users' needs.

Adler and Borys (1996) recognised four design features (repair, internal transparency, global transparency, and flexibility) as key attributes to differentiate between enabling and coercive formalisation. Firstly, the *repair* dimension of coercive formalisation entailed low employees' autonomy and limited divergence from rules. Rules and guidelines were designed to minimise shirking and were used as a control mechanism for managers to evaluate whether employees' behaviours followed existing regulation and procedures. Employees had limited opportunities to use their own judgement and intelligence to resolve problematic situations or identify opportunities for improvement. In contrast, enabling repair involved rules that were designed to assist users. There was latitude and room for adjustments to

fix breakdowns and amend work failures. Deviations from rules were possible in order to overcome job' contingencies. Employees had a certain degree of freedom to identify weaknesses of the processes within the system as well as improvement opportunities previously unidentified.

In the context of my study, *repair* features related to enabling formalisation were focused on the design of the 'self-assessment' tool incorporated within the system. This feature was viewed by interviewees as an opportunity for organisational learning and continuous quality improvement because it encouraged better organising and planning by way of revising and updating hospitals' protocols, processes and pathways. On the contrary, two features associated with limited autonomy for changes and restricted opportunities to express opinions provided evidence of the coercive design of the accreditation system. Individuals had limited scope to influence the process and viewed, for instance, the accreditation manual as a mechanism constraining their actions and offering very limited assistance. Last minutes changes imposed by the government before the final audit also limited the capacity of hospitals to achieve better results. In addition, the Quality Manager of Hospital L provided an example of 'pseudo-participation' (Argyris, 1952, 1953) where the government did not take into consideration various comments and suggestions made by several individuals.

Secondly, *internal transparency* or 'glass-box design' (Adler and Borys, 1996) referred to the degree of insight and available information for employees to recognise and understand the internal logic of the system. It was related to the understanding of how local processes work in practice (Ahrens and Chapman, 2004). Adler and Borys (1996) provided an example where internal transparency under coercive formalisation was low because employees were only expected to put into practice work instructions without having a clear understanding of their local implications. Quite the opposite was the situation when employees were provided with visibility and full knowledge about the critical elements of a process and understood the internal rationale and practices within the system. Situations where a manual became a working tool and employees had feedback on performance were used by Adler and Borys (1996) as examples of enabling internal transparency.

In my research[62], *internal transparency* represented the degree of understanding that individuals had about their own department or area. For example, the nursing director would have an enabling view of internal transparency if he/she understood the implications of the processes and practices carried out in his/her nursing department during the evaluation of the accreditation process. The analysis of internal transparency in the previous chapter showed salient attributes and conflicting views of this feature in terms of the use of the system and its enabling/coercive formalisation. For example, enabling features revolved around leadership and management involvement and the internal channels created to improve the transparency of the process. The evaluation of the accreditation standards through meetings and the support from top management was critical to cascade information down and promote discussions on continuous quality improvement. Teamwork and collaboration was also mentioned by interviewees as an enabling mechanism to coordinate the activities and processes within the same department. On the contrary, coercive features of internal transparency were based on restricted access to information and poor communication and engagement with lower staff levels. Noticeable boundaries in accordance with work profile and individual responsibilities provided restricted staff access to accreditation information.

Thirdly, *global transparency* represented the level of understanding that employees had about the broader system in which they operated (Adler and Borys, 1996). It represented how and where local processes fit into the overall organisational structure (Ahrens and Chapman, 2004). Enabling global transparency provided broader information to managers and employees so they could visualise the general context and understand the alignment between local activities and organisational strategies and objectives. It was not just about delegation and decentralisation processes, but also about users' understanding of the overall stream of information channels and work implications. On the contrary, coercive formalisation only facilitated comprehensive information to management because employees routinely performed their individual tasks without being aware of the organisational

[62] Following the view of Dowling and Leech (2014) with regards 'internal transparency' vs. 'global transparency' classification (see footnote 20), the researcher recognises that the distinction between the two types of transparencies could be arbitrary and should be delimited according to the research question/s.

strategies and goals. Employees' knowledge and understanding of the system was limited to their working area.

In my study, *global transparency* represented primarily the degree of understanding that individuals had about other departments or areas in their own hospital. For example, the nursing director would have an enabling view of global transparency if he/she understood the implications of the processes and practices carried out in other departments such as Human Resources, Economic and Finance or Information Systems. Global transparency was also interpreted as the degree of understanding that senior managers had about other hospitals or the Health Department. This latter interpretation was reflected in some comments made by the surveyor of the auditing firm and some staff in both hospitals. For example, a number of interviewees in Hospital L pointed to the assistance they provided to a nearby hospital during the accreditation process and the quality manager commented on several meetings with other quality managers from different hospitals. My interpretation shares some parallels with Ahrens and Chapman (2004) study of a restaurant chain as they considered global transparency going beyond the restaurant departments and reaching "other restaurants and leisure businesses in one's region" (p.294). Conversely, my interpretation is slightly different from Touati and Pomey's (2009) definition of 'global transparency' in the hospital accreditation context, which was based on what is done with the information provided by the accrediting body. Although my study recognised the critical role of the accrediting body (Health Department) in the context of global transparency, the focus was on departments within the same hospital.

The analysis of global transparency in the previous chapter indicated noticeable enabling features related to the design of the accreditation system, but also contrasting views in terms of enabling/coercive formalisation related to the use of the system. For example, enabling features of design related to the comprehensive and balanced view of the system as well as the feedback channels created to improve transparency across departments. Similarly, the use of the system displayed enabling global transparency in terms of leadership, top management involvement, and teamwork as they promoted transparency between departments. In addition, external collaboration with other hospitals allowed greater global transparency at the 'hospital vs. other hospitals' level. In opposition, formalisation

was experienced in a coercive way in the use of the accreditation system due to the restricted access to information, poor communication across departments, and the managerial orientation of the system. Consistent with previous research by Ahrens and Khalifa (2015), some middle managers indicated that their knowledge and understanding of the system was limited to their working area and they were unaware of the general view of the system. In addition, global transparency in terms of 'hospital vs. Health Department' was viewed coercively by many interviewees as a result of the limited support and feedback provided by the Health Department.

Fourthly, *flexibility* denoted the extent to which formalisation provided employees with different choices and alternatives to proceed in completing their tasks (Adler and Borys, 1996). It referred to whether or not systems had the ability to provide advice and make suggestions. It was understood as the discretion and judgement of organisational members over processes and practices and the level of freedom to decide how to use a system or its processes (Ahrens and Chapman, 2004). Due to the fact that unrestricted flexibility could have detrimental effects, organisations developed mechanisms and boundaries to control responsibility. Coercive flexibility suggested that users followed strict rules where the possibility for skipping steps or using shortcuts was highly limited. Authorisation from management was needed when employees planned to deviated from existing regulation. In contrast, enabling flexibility considered divergences from written and formal rules (i.e., procedure manual) as a learning opportunity to improve the effectiveness of the system. Flexible formalisation encouraged users to adapt and customise processes to their particular needs and requirements (Adler and Borys, 1996).

The interpretation of *flexibility* in my study considered that flexibility could be understood at different levels ranging from the implementation context to the procedures or standards themselves (i.e., changing procedures or standards) (Adler and Borys, 1996). Flexibility in my study was interpreted as relating to the accreditation system per se rather than the capacity of employees to use the system (e.g., repair). For example, coercive formalisation suggested that any deviation from the accreditation standards' manual should be authorised by a top manager; however, due to the compulsory nature of the accreditation system, there was no possibility to deviate from the handbook. Findings showed that the accreditation

system was designed in both enabling and coercive ways. On the one hand, enabling formalisation was evident in the freedom to select auditing firm, contest surveyors' recommendations and the possibility of evaluating voluntary or non-essential standards to promote quality improvement activities. On the other hand, the lack of flexibility of the system was associated with the enforced 'one size fits all' approach (Sax and Marx, 2014) which did not allow any type of customisation to the specific characteristics of the hospitals.

Although the study of Dowling and Leech (2014) classified flexibility as 'constrained' and 'unconstrained', it was seen as inappropriate to use their terminology in my study because the concept of 'constraining', in a broad sense, has already been suggested and used (or misused) as a synonym for 'coercive' in the literature (i.e., Tessier and Otley, 2012; Hald and Mouritsen, 2013). In addition, the distinction between 'flexibility' and 'repair' in prior literature was not particularly straightforward[63]. For example, Adler and Borys (1996) referred to the intelligence of users in both repair and flexibility features, which creates ambiguity around the distinction between the two features. In my study, repair was more related to the aim of the system at a 'micro' level (i.e., users revised and updated medical processes to comply but also improve quality standards) and flexibility was seen more as a technical feature of design associated with a 'macro' level view (i.e. the ability to select auditing firm, limited customisation).

7.3.2 Differences between design and use

First of all, caution in the interpretation of my findings is needed since the analysis was based on *'ex-post' design* of the accreditation. Findings related to the accreditation system were presented in the previous chapter based on contemporary literature on management control and performance management systems that differentiated 'design' and 'use' as two separate issues (Henri, 2008; Berry et al., 2009; Ferreira and Otley, 2009; Micheli and Manzoni, 2010; Neely et al., 2010; Sundin et al., 2010; Agostino and Arnaboldi, 2012; Cugueró-Escofet and Rosanas, 2013). Although there was a broad consensus that both aspects were strongly

[63] The researcher adopted the view proposed by Adler and Borys (1996) in which 'repair' related to the user and 'flexibility' to the system.

intertwined (Agostino and Arnaboldi, 2012), the dearth of research examining the links between design and use in the literature has been noted (Henri, 2008).

Additionally, the enabling/coercive framework was originally developed as a theoretical lens to examine design and implementation[64] of bureaucratic formalisation (Adler and Borys, 1996), but the introduction of the framework to the management accounting literature by Ahrens and Chapman (2004) resulted in its application to examine the use of MCSs. Research on the enabling/coercive framework can sometimes appear fragmented and lacking consistency as studies have explored different phases of the design/use continuum. Overall, there were few examples of enabling/coercive studies that focused on both 'design and use' of control systems, except for Dowling and Leech's (2014) study set in the audit context. Dowling and Leech (2014) argued that prior studies on the enabling/coercive framework focusing solely on features of design *or* use of control systems offered a partial and limited understanding of the framework and its potential implications for individual/collective perceptions. Therefore, the value of separating *design* ('ex-post' in my study) and *use* in my study was to provide a more comprehensive view of the accreditation system.

In terms of the *design* of organisational systems, the distinction between enabling and coercive formalisation was based on the difference between 'equipment' designed to encourage and improve usability and capabilities of users, and 'equipment' designed to foolproof the process and reduce dependency on the skills of users founded on a deskilling logic (Adler and Borys, 1996; Adler, 1999). Jørgensen and Messner (2009) also differentiated between enabling and coercive features of design based on Adler and Borys' (1996) view that coercive systems were externally developed by technical experts unrelated to the organisation, and enabling systems were internally designed by users, whose participation was particularly high during the initial phases of the process (i.e., specification, development, and test of the features of the system). Their description of coercive formalisation suggested that some of the four features of design, especially repair and flexibility, were not present in my study as users (i.e., directors and managers in the hospitals) had limited opportunities to express their views during the initial

[64] In my study, it was not possible to separate the 'design' and 'implementation' phases as data was collected post the design phase. Features related to the 'implementation' process were incorporated in the 'design' phase.

design phases because the system was designed by external specialists. Those in charge of developing the system were technical experts from the Health Department, selected because their expertise would reduce the likelihood of unnecessary adjustments to the system after implementation. There was limited scope for participation by the hospitals and a 'one size fits all' approach (Sax and Marx, 2014) was adopted. Findings suggested that the process adopted a 'command and control' authoritarian style which was a typical top-down coercive approach (Ahrens and Chapman, 2004). However, several interviews with some individuals who participated during the design phase of the hospital accreditation (i.e., five interviews with members of the Health Department team in charge of the accreditation) were also helpful to recognise a number of enabling design features. Examples included the self-assessment tool, the comprehensive view of the system, the creation of feedback channels with surveyors and the possibility of evaluating non-mandatory standards. These were regarded as features that incorporated attributes related to increased organisational learning and continuous improvement despite the fact that users were not involved in the design phase of the process.

Thus, findings revealed that certain 'external' design features could also promote enabling formalisation showing parallels with prior literature where 'internal' enabling design features such as time and autonomy to experiment, organisational professionalism, availability of modern IT systems, strategy alignment, and opportunities to develop personal skills were salient (Wouters and Wilderom, 2008; Chapman and Kihn, 2009; Jørgensen and Messner, 2009; Wouters, 2009; Wouters and Roijmans, 2011; Grown et al., 2012). Although prior research has predominantly focused on enabling systems to illustrate the benefits of control mechanisms in terms of working practices, motivations of employees and ways for managers to deal with unanticipated contingencies, it could be argued that there was still a need to amalgamate them with rigid and specific rules to achieve the desired organisational objectives (Free, 2007). Despite the fact that prior studies recognised the coexistence of the two types of controls (Ahrens and Chapman, 2004; Free, 2007; Cools et al., 2008; Dowling and Leech, 2014), it still remained unclear if the integration of both perspectives (enabling and coercive) was a realistic possibility for management control purposes (Jordan and Messner, 2012).

In terms of the *use* of the accreditation system, findings showed that transparency was a more dominant feature than repair or flexibility in determining the enabling/coercive formalisation of the system. There was a general view that the accreditation system promoted transparency through better leadership and management involvement, enhanced teamwork, and external collaboration with other healthcare organisations. However, a lack of transparency resulting from restricted access to information, poor communication with lower employee levels, and incomplete feedback and support from the Health Department supported a more coercive view of the accreditation system.

Thus, findings suggested that both design and use phases included enabling and coercive features making it difficult to categorise the accreditation system as either enabling or coercive. The enabling/coercive framework provided a useful lens to illustrate that design and use features of a control system could be perceived differently by the individuals in the same organisation. Adler and Borys (1996) used the example of the ISO9000 standard to recognise potential different views of repair in the same system between management (enabling control) and employees (coercive control). As illustrated in my study, findings revealed that prominent *design* features were 'repair' and flexibility', whereas prominent *use* features related to 'internal transparency' and 'global transparency'. The focus only on the *design* or *use* aspects of the system could have portrayed a limited and incomplete picture of the entire accreditation process.

7.3.3 Suitability of the four features for categorising external control systems

To date the literature adopting the enabling/coercive framework has focused on internal control systems (Ahrens and Chapman, 2004; Wouters and Wilderom, 2008; Jørgensen and Messner, 2009; Jordan and Messner, 2012). To gain an insight into potential differences between internal/external control systems, a number of studies were reviewed which investigated enabling/coercive control features in settings where one organisation had high dependency on another organisation, i.e., buyer-supplier relationship (Free, 2007) and multinational enterprise (Cools et al., 2008). For example, there were some parallels between 'buyer-supplier' (Free, 2007) and 'government-hospital' relationships in my study due to the emergence of single/double loop learning processes (Argyris, 1976). While single loop learning

was achieved through quality assurance assessing actual performance in relation to pre-defined targets, double loop learning was accomplished by means of continuous quality improvement practices that involved two-way communication channels with surveyors and to a lesser extent the Health Department. Free (2007) used an analogous analysis to illustrate how coercive repair features were related to single loop learning and enabling repair features were associated with double loop learning. In addition, there were similarities between 'parent-subsidiary' association in multinationals (Cools et al., 2008) and 'government-hospitals' relationship in my study as hospitals were dependent on the demands of the Health Department. Due to its compulsory nature, hospitals ('subsidiary') had no other choice but to accept and follow the instructions of the Health Department ('parent'). Findings showed certain similarity with Cools et al.'s (2008) study as coercive features were primarily related to repair and flexibility and enabling features were related to transparency. Their study indicated that compliance with single tax pricing policy caused an increase in the coercive use of the system leading to a 'counterbalanced' situation where transparency increased (both internally and externally) at the expense of repair and flexibility. Although this type of 'counterbalance' was not observed in the context of my study, their findings suggested that the enabling/coercive framework could also be adopted to examine external control systems.

Findings in my study indicated that in the context of externally mandated systems, certain attributes of the enabling/coercive framework had less relevance than for internal systems. This could be explained in the context of different management expectations of the features of internal versus external systems. For example, while repair and flexibility have been found to be important features in determining whether an internal MCS was enabling or coercive (Wouters and Wilderom, 2008; Jørgensen and Messner, 2009), there was an acceptance in my study that it was not possible to tailor external systems specifically for each organisation and that it was inevitable that the system would have low levels of repair and flexibility. Interviewees accepted the need for strict compliance with the accreditation standards and restricted choice to deviate from government rules. As a result of acceptance of these features, it was their perception of the transparency features

(internal and global) which differentiated their view on the extent to which the system was used in an enabling/coercive manner.

Additionally, the original framework developed by Adler and Borys (1996) placed equal importance on each of the four design features (repair, internal transparency, global transparency, and flexibility). However, my findings suggest that in the context of an external control system, certain features were more dominant in determining whether the system was viewed as enabling or coercive overall. For example, participants in my study considered the accreditation system as an enabling mechanism due to its 'transparent' use even if the design features of 'repair' and 'flexibility' were rather coercive. Dowling and Leech (2014) provided two reasons to explain why the system could be viewed as enabling even if some of the four features of the system were primarily coercive. Firstly, the fact that the system did not facilitate repair features was seen as enabling in their study because it required auditors to apply and develop their own knowledge to identify and resolve contingencies. In my research, directors and managers of the two hospitals had to develop and revise organisational plans and clinical protocols and processes because the Health Department provided limited guidance. Secondly, Dowling and Leech (2014) pointed to differences in levels of expertise between the factory workers examined in Adler and Borys' (1996) study and the skills and abilities of high level professionals such as auditors. In my study, hospital directors and managers were highly educated and very different from factory employees engaged in manual work. Therefore, some aspects of the original framework may not be applicable in 'knowledge-intensive' organisations like hospitals (Adler et al., 2003) that are characterised by high levels of expertise, professionalism, and a certain degree of autonomy. For example, the term 'autonomy' (one of the keywords of 'repair') was viewed by interviewees as difficult to relate to and not easily understood during the interviews. Perhaps the fact that healthcare professionals have enjoyed more autonomy in their jobs than other professional groups made them uneasy when responding to questions related to the capacity to use their own judgement and skills to deal with unforeseen problems. Additionally, differences between professional employees and factory employees were also discussed by Kwon (2008) who argued that bureaucratic processes like standardisation could not

be perceived as hostile by professionals if they understood the rationale behind its principles and perceived the process as fair and objective.

Another possible reason why coercive features (particularly repair and flexibility) were accepted by interviewees may relate to the degree of commitment to their own organisations. Weak participation and resistance from certain groups of healthcare professionals (i.e., doctors and physicians) were frequently mentioned in the literature as common barriers for the implementation and use of accreditation programmes (Touati and Pomey, 2009; Pomey et al., 2010). The adoption of new methods like accreditation differed from pre-established and well-accepted clinical practices, because they usually involved changes in values, beliefs and behaviours deeply rooted in the culture of hospitals. This was considered challenging by management because hospitals reflected a mix of different groups and subcultures of healthcare professionals which were not easily managed (Greenfield and Braithwaite, 2008). Whereas nursing staff have been found to be more favourably inclined towards the accreditation process demonstrating high commitment, medical professionals seemed to have shown less engagement with the accreditation process (Pomey et al., 2010; Alkhenizan and Shaw, 2012). Although a very limited number of interviews were conducted in my study with nursing and medical staff, significant commitment and involvement were observed by both professional groups, particularly nursing staff (as indicated by the Nursing Director of Hospital L in the findings chapter Section 6.4.3). Top management commitment and leadership was found to be critical in actively engaging medical and nursing professionals during the process. Despite the fact that my study found an overall acceptance and lack of resistance towards the accreditation system, there was also a view that more needed to be done in order to embrace the vision of the Health Department of cultural changes.

7.4 Management attitudes towards the system

This section discusses recent calls made in the literature to distinguish between an enabling/coercive formalisation and the attitudes of individuals towards control in order to answer the fourth research question: *What are the attitudes of management towards the accreditation system and the triggers of those attitudes?* Two sub-

sections are used to classify the different attitudes towards the accreditation system: (i) positive and negative attitudes towards control, and (ii) ambivalence: simultaneous positive and negative orientation towards control.

7.4.1 Differences between positive/negative attitudes towards control and enabling/coercive formalisation

While the literature on enabling/coercive control recognises that the two types of control operate side by side (Ahrens and Chapman, 2004), are not mutually exclusive (Free, 2007), and form part of the same control continuum (Stansbury and Barry, 2007), research has tended to classify them as positive or negative controls. Adler and Borys (1996) indicated that if employees recognised that formal systems supported them to better master their jobs, then control systems were considered enabling and positive. In contrast, if employees felt that top management used enforcement and compliance, formal systems were considered coercive and negative. However, my study showed that coercive systems were considered necessary for control purposes and questions whether coercive control should be automatically linked to negative perceptions and undesirable outcomes. My findings also support Adler's (1999) view that perhaps enabling formalisation is not always preferable as it could be less effective in highly competitive environments where cost was the key driver or in situations that frequently involved expensive training programs to indoctrinate both management and employees.

Tessier and Otley's (2012) study stressed the importance of separating the features of the system from the perceptions of employees towards control systems. They pointed to ambiguity and confusion in the grey area of the dual *role* of controls and *perceptions* of controls as managerial 'intentions' (i.e., enabling/coercive), employee 'attitudes' (positive, negative, neutral) and 'quality' of controls (good/bad) were closely related but addressed different issues. They also pointed to the fact that the original enabling/coercive framework developed by Adler and Borys (1996) evolved from the quality of controls (good/bad) based on its four design features to the dual role of controls (enabling/coercive) based on the use of controls (Ahrens and Chapman, 2004). Findings in my study support a need to separate managerial intentions for controls ('government' in my context) from employees' perceptions of controls ('directors and managers' in my context).

Intentions were related to the aim of the government to accomplish minimum quality standards (enabling/coercive), and perceptions dealt with the attitudes of directors/managers towards the accreditation system (positive, negative, neutral). Some contradictory findings of my study (i.e., good for teamwork and collaboration but a top management tool) could be explained by organisational differences at the 'employee' level: how top management (i.e., directors and top managers) *intended* to use the system versus how subordinates (i.e., directors' assistants and middle managers) *perceived* the use of such system.

Adler and Borys (1996) and Tessier and Otley (2012) also emphasised that controls could be perceived differently by different people (Scott, 2001). Whereas Adler and Borys (1996) revealed different views of management and employees towards the ISO9000 international quality standard, Tessier and Otley (2012) referred to an example of SOX-related controls which could be perceived as a restrictive mechanism or a mechanism to encourage employees to be meticulous and responsible. They argued that organisations with many existing procedural controls and departments that were much familiarised with such types of controls perceived more positively initiatives like SOX-related controls. In my study, hospitals were organisations very familiar with operating under very restrictive control systems and coercive pressures, but also organisations where healthcare professionals frequently enjoyed a high degree of autonomy. Therefore, similar perceptions as the ones pointed to by Tessier and Otley (2012) could be expected in the context of the accreditation system.

While attitudes towards a system (positive, negative, and neutral) emanated from perceptions of control and were related to enabling/coercive formalisation, Tessier and Otley (2012) also identified other factors impacting on the perceptions of controls such as the "presentation of controls" (p. 175), which functioned as a mediator between managerial intentions and employee attitudes. They used the example of TQM and SOX compliance programmes to show that both approaches had similar features (i.e., flow charts and exception reports), but due to the fact that they were presented and contextualised in different settings, TQM was viewed as a performance improvement tool and SOX compliance was seen as an enforced tool to comply with regulation. In my study, the accreditation system followed the principles of TQM, but was also regulated and enforced by government directives.

This mix of features could help to explain why interviewees had positive and negative views of the accreditation system. For example, my findings showed that some 'presentation' characteristics such as poor visual and graphical features and unclear coding system intensified the negative view of the accreditation system.

Although my study also pointed to a strong correlation between enabling features and positive attitudes and between coercive features and negative attitudes, there were some examples in the previous chapter showing that the relationship was more complex. Findings on a positive attitude towards the coercive role of the accreditation system were consistent with previous research by Dowling and Leech (2014) who provided examples in an audit context related to repair and flexibility where coercive features were perceived in a positive way. Their example related to a system which caused frustration due to lack of guidance on how to deal with audit errors but which was recognised as increasing learning on the overall audit process in working out how to deal with the errors. Therefore, a coercive repair feature such as the absence of guidance led to positive outcomes. In addition, they showed that some inflexible requirements of the system could have been seen as intimidating because they did not allow users to override the system, but auditors commented that the obligatory step to give a recommendation in a rationale box empowered their decisions and increased confidence in their assessment. Evidence presented in Chapter 6 suggested that some coercive features were not perceived negatively by interviewees, but rather were accepted as a requirement to fulfil the demands of an accreditation system. For example, restricted access to information in Hospital S was a coercive feature which reduced transparency, but it was not perceived in a negative way because the group of directors comprising the top management team adopted a team-working approach where information was provided to employees as needed. Thus, the reduced transparency transpiring from restricted access to information did not have any adverse impact on performance of work. My study recognised that coercive features were not necessarily perceived negatively if they were setting boundaries. For example, a number of individuals were not satisfied with the content of the accreditation standards, but they had no problem with the fact that autonomy for changes was limited. A coercive system could be a 'good' system or a coercive system could be a 'bad' system (Adler and Borys, 1996; Tessier and Otley, 2012) because of poorly designed coercive features. Similarly,

enabling controls were not always perceived positively. The evaluation of non-essential or voluntary standards was designed as an enabling feature that promoted higher flexibility and continuous quality improvement, but it was sometimes perceived negatively because it generated extra workload and was time-consuming. Furthermore, the creation of feedback channels enabled repair and transparency, but was perceived as 'leading to 'pseudo-participation' (Argyris, 1952, 1953) and viewed negatively.

Thus, my findings illustrate that the relationship between enabling/coercive and positive/negative is not a straightforward one. This mix of positive and negative attitudes towards control resulted in ambivalence towards the accreditation system which is discussed in the next section.

7.4.2 Ambivalence towards the system

The study of ambivalence[65] (Merton, 1976) in my research was motivated by Adler's (2012) argument that bureaucracy can be perceived by employees as simultaneously enabling and coercive. Adler (2012) argued that research on bureaucracies has primarily focused on the enabling features of formalisation in order to challenge the findings in the literature on the negative consequences of coercive systems for working practices and employees' motivations. While findings indicated that ambivalence can exist at individual and collective levels (Adler, 2012; Ashforth et al., 2014) my study was focused on collective ambivalence at managerial level, primarily top management and top-middle managers (i.e., quality managers). This view was supported by Adler's (2012) interpretation that attitudes towards systems reflect collective ambivalence when some employees felt that the system helped them and other employees were of the view that the system was subtly exploiting them.

Additionally, Tessier and Otley (2012) pointed to the work of Adler and Borys (1996) to indicate that employees' attitudes towards formalisation were positive when it helped in better understanding their tasks and processes, and negative when managers' efforts were focused on compliance and coercion. Tessier and Otley (2012) also suggested the possibility of 'neutral' attitudes towards control to denote

[65] As previously indicated in Chapter 3, my study referred to 'sociological' rather than 'psychological' ambivalence.

neither a positive nor a negative attitude. However, neutral does not capture simultaneous positive and negative emotional responses to control. Thus, the concept of ambivalence (Adler, 2012; Ashforth et al., 2014) was seen as a useful concept to describe the coexistence of positive and negative attitudes of interviewees towards accreditation based on the analysis of enabling and coercive features of control. In my study, ambivalence reflected the overall perception of interviewees towards the accreditation system more than their perceptions of particular elements of the system (i.e., the four features of the enabling/coercive framework). Hospital accreditation was perceived by interviewees as a facilitator for achieving 'quality assurance' and 'continuous quality improvement' (Pomey et al., 2010) and also as a mechanism where enabling and coercive features were not mutually exclusive (Free, 2007). For example, the Economic & General Director of Hospital S perceived accreditation as a 'necessary evil' (expression previously used by Adler and Borys (1996) to describe coercive formalisation and Sewell (1997) to portray healthcare accreditation), but with a positive connotation due to its 'continuous quality improvement' features. Hence, this perception exhibited ambivalence on the ability of the system to achieve the objectives pursued by the government.

Furthermore, my findings revealed that ambivalence was more likely to appear when two or more forces or ideas pushed individuals in opposing directions (Oreg and Sverdlik, 2011). As noted earlier in the Chapter 3, Ashforth et al. (2014) identified four types of 'triggers' that could instigate the development of ambivalent perceptions and attitudes: (i) hybrid identities, contradictory goals, and role conflicts; (ii) dualities; (iii) multifaceted objects; and (iv) temporal factors. These four factors helped explain the reasons why accreditation was perceived positive and negative at the same time by interviewees. Hospitals, for example, are complex organisations where multiple stakeholders need to address ambiguous and sometimes conflicting objectives within a context highly influenced by external demographic, economic, and political pressures. Such contextual background had the potential to instigate the development of oppositions where ambivalent situations were more likely to take place.

For instance, *hybrids identities, contradictory goals, and role conflicts* in the context of my study, denoted that accreditation was positively perceived by

interviewees because it encouraged collaboration with other departments to elaborate patient safety protocols; however, it was also negatively perceived due to the pressure to conform to government demands. The role of the 'quality manager' as a mediator between top management and middle management also created some ambiguity in terms of positive and negative perceptions around the usefulness of the information analysed during the accreditation process. *Organisational dualities* took place at individual and collective levels and included situations where individuals had to comply with twofold objectives such as local (i.e., demotivation of teams) vs. government levels (i.e., accreditation), short term orientation (i.e., financial pressure) vs. long term orientations (i.e., enhanced quality standards) or competition (i.e., private funds) vs. collaboration (with other hospitals during the accreditation process). Uncertainty caused by organisational change models like the hospital accreditation system was perceived positively and negatively by some interviewees because it combined constricted and flexible features. Accreditation was also a *multifaceted object* because it was based on a comprehensive performance system of almost 700 essential standards classified in nine dimensions encompassing structures, processes and results. Although interviewees viewed this particular system as fairly balanced, familiarity with the accreditation process allowed them to recognise the imperfections and limitations of the system. Lastly, *temporal factors* included, for example, the impact of economic climate on the positive/negative attitudes of individuals towards the last two accreditation processes. The first accreditation process in 2007-2008 using the actual model (a modified version of the EFQM) was evaluated at the end of a booming and prosperous period whereas the second accreditation or re-accreditation in 2013-2014 was examined in a period of recession, austerity and uncertainty. Furthermore, a transition era in terms of technological developments between the two processes created a large increase in medical and clinical information sharing, which encouraged higher participation and delegation from top management, multidisciplinary cooperation, and higher collaboration between different healthcare organisations.

The literature has also pointed to other reasons that could explain the presence of ambivalence in my study. First, Jewell (2003) argued that the closer the deadline for a process, the more ambivalent individuals felt about it. My research took place

during the final phases of the re-accreditation in 2013-2014 and some individuals may have experienced ambivalence due to the timing of the interviews as they were carried out at different stages of the process (just before, during, and right after the final audit). However, no differences were observed between findings from interviews that took place before/after the final audit. Second, Meyerson and Scully (1995) and Plambeck and Weber (2010) claimed that when individuals developed an integrated 'holistic' view or assessment of an issue, it was more likely to result in ambivalent perceptions. Plambeck and Weber (2010) argued that individuals who evaluated more complex systems that contained a large number of aspects or features were less likely to perceive the system as simply good or bad. Therefore, it is possible that members of the top management teams had an ambivalent perception of the system due to its complexity and the total number of standards evaluated (almost 700). Third, Plambeck and Weber (2010) also pointed to the potential influence that organisations had over individuals based on prior research related to organisational beliefs, experiences, and role structures. For example, they claimed that cumulative experience, coherence of social role expectations, and structural diversity stimulated top management to analyse strategic issues from varied angles and unconventional perspectives resulting in more ambivalent evaluations. This suggested that the experience accumulated during the first accreditation process and the mix of directors from different medical and non-medical (i.e., supporting activities like accounting and technical services) departments in the top management team could have led to an ambivalent perception of the re-accreditation process.

Although ambivalence was found to be a common feature in many organisations (Piderit, 2000) and its positive effects (i.e., creativity, innovation) and negative outcomes (i.e., behavioural vacillation, paralysis) are well documented in the literature, little is known about how organisational individuals react to ambivalent orientations (Ashforth et al., 2014).

7.5 Chapter summary

This chapter was structured into three sections. The first section provided a discussion of how the findings presented in Chapter 5 addressed the first research

question. It portrayed the hospital accreditation system as a NPM tool and discussed the role of the accreditation as a 'driver for change' and a 'hybrid' model that embraced both quality assurance and quality improvement philosophies. It also captured the importance of the dual management of cost/quality objectives and brought out the tension and complexity of measuring efficiency, and in particular the measurability of quality. The second section discussed the design and use features of the accreditation system drawing on the enabling/coercive formalisation framework and findings presented in Chapter 6. The aim was to answer the second and third research questions. The focus of the discussion was on the description, interpretation and suitability of the four features of the framework (repair, internal transparency, global transparency, and flexibility) in the context of external control systems and also its applicability and relevance for public sector organisations. Finally, the third section provided a discussion around the grey area of distinguishing between managerial intentions and employees' perceptions of controls. Findings from Chapter 6 were used in this section to address the fourth research question. The concept of ambivalence was used to describe the simultaneous presence of positive and negative attitudes towards the system and the factors which trigger ambivalence were discussed.

CHAPTER 8: CONCLUSION

8.1 Introduction

This chapter highlights the key findings of the study along with the main contributions of the study, implications of the findings for healthcare management, strengths and limitations, and areas for future research. The chapter is organised as follows. Section 8.2 summarises the main findings from the four research questions addressed in the study. Section 8.3 details the contribution of the study to existing knowledge. Section 8.4 outlines the practical implications and Section 8.5 focuses on the main strengths and limitations. Section 8.6 highlights a number of avenues and areas for further research and finally, Section 8.7 provides an overall conclusion.

8.2 Research summary

This research investigates the role, control features and perceptions of management on the accreditation system detailed in four research questions. In order to address the first research question *'What is the role of the accreditation system?',* this study examines the characteristics of the existing accreditation model and shows its function as a NPM tool, the changing organisational nature of the system and its transformation from a quality assurance system to a continuous quality improvement tool. It also details the complexities and challenges for hospitals in managing efficiency concerns related to cost containment and quality improvement.

This research adopts the enabling/coercive formalisation framework (Adler and Borys, 1996) as a theoretical lens to address the remaining three research questions. *'Design'* (RQ 2) and '*use'* (RQ 3) features of the accreditation system are examined separately along with the *'attitudes of management towards the system'* (RQ 4). Analysis of the four features of the framework (repair, internal transparency, global transparency, and flexibility) indicates that the accreditation system combines both enabling and coercive elements to facilitate quality assurance and quality improvement. On the coercive side, managers perceive the accreditation system as a coercive and rigid mechanism where users have limited autonomy to deviate from

rules and guidelines due to the compulsory requirement to adopt the system. On the enabling side, management have the opportunity to engage in quality improvement practices and improve their understanding of the internal processes used in different hospital departments due to higher levels of transparency and team interactions enabled by the system. The coexistence of coercive and enabling features is well understood by interviewees and shows that both types of formalisation are not mutually exclusive (Free, 2007). In general, there is a close relationship between enabling formalisation and positive attitudes and between coercive formalisation and negative attitudes, although a small number of exceptions are noted which illustrate the need to differentiate between these two aspects of the system as pointed out by Tessier and Otley (2012).

Further, the analysis of findings shows situations where managers hold mixed positive/negative attitudes at the same time towards the accreditation. This supports the concept of 'ambivalence' (Merton, 1976) towards control systems and reinforces the view that different control features can occur simultaneously leading to mixed perceptions and feelings. In addition, this research corroborates recent research by Ashforth et al. (2014) on a number of potential triggers that can activate ambivalent attitudes. The simultaneous support for, and concern over, the accreditation process indicates that ambivalence has the potential to aid a deeper understanding of the mixed attitudes towards externally mandated control systems. Findings also support Adler's (2012) arguments that bureaucracy can be perceived by employees as simultaneously enabling and coercive.

8.3 Research contribution

This research offers novel insights into the relationship between the dual role of control, enabling/coercive features of formalisation, design/use of external performance management systems, and perceptions of management towards such control systems. Since this area is relatively new and the related literature is still limited, this study makes six noteworthy contributions.

Firstly, an important contribution of this study is that it provides a detailed description of the dual role of accreditation as a mechanism for both regulation and quality improvement purposes. It illustrates how the role of accreditation has shifted

from a regulatory tool to one emphasising continuous improvement showing that contemporary accreditation systems are becoming 'hybrid' models (Greenfield et al., 2016). It builds on Touati and Pomey's (2009) study which examines whether accreditation systems in Canada and France act as tools for bureaucratic coercion or learning and the consequences of this for organisational practices. While their study examined the features of the two accreditation systems using secondary research and a small number of interviews with directors of accreditation bodies, this study presents evidence on the enabling/coercive features of both design and use from two in-depth case studies of different size hospitals in the context of the Catalan accreditation process. My study provides an in-depth insight into how accreditation has manifested as a 'driver for change' (Pomey et al., 2004, 2010; Cooper et al., 2014) and a quality improvement tool that incorporates the simultaneous pursuit of quality and efficiency/cost (Grepperud, 2015).

This dual role of accreditation as a setting for examining enabling/coercive features has parallels with other settings in the enabling/coercive literature where organisations had to manage simultaneous objectives of 'efficiency and flexibility' (Adler, 1999; Ahrens and Chapman, 2004; Wouters and Wilderom, 2008; Jørgensen and Messner, 2009), 'cost reduction and flexibility' (Naranjo-Gil and Hartmann, 2006), 'formalisation and decentralisation' (Meirovich et al., 2007), 'corporate policeman and business partner' (Hartmann and Maas, 2011) and 'compliance and engagement' (Dowling and Leech, 2014). My study shares certain similarities with some of these studies since the accreditation system guided hospitals to manage both 'quality assurance' and 'continuous quality improvement', which could be categorised as 'compliance and improvement'. It could also be argued that the accreditation system helped to achieve both 'efficiency' (i.e., increased quality and reduced costs) and 'flexibility' (i.e., better organisation of clinical protocols and processes across different departments) despite certain rigidity around several features of the system. The examination of the accreditation system as a catalyst for efficiency responds to recent calls in the accounting literature for research on the interplay between cost and quality in healthcare (Cardinaels and Soderstrom, 2013). Findings support the complexity of capturing and measuring quality in hospitals due to the sometimes unquantifiable

and intangible interdependency between efficiency and quality indicators (Hussey et al., 2013).

Secondly, this study contributes to existing knowledge on enabling/coercive formalisation (Adler and Borys, 1996) by presenting a comprehensive examination of both formalisations and incorporating both *design* (albeit an ex-post examination) and *use* of the system into the analysis. The previous paragraphs discussed the nature of the accreditation system in terms of its role. Findings suggest that both enabling and coercive formalisation coexist within the system, supporting the absence of 'pure' types of enabling or coercive systems (Ahrens and Chapman, 2004). Although previous research recognises the coexistence of enabling and coercive features of formalisation (Ahrens and Chapman, 2004; Free, 2007; Stansbury and Barry, 2007: Cools et al., 2008; Dowling and Leech, 2014), studies have deliberately focused on the enabling dimension to illustrate its positive effects as well as the achievement of twofold objectives. However, my study focuses on both enabling and coercive formalisation arguing that the description of the accreditation as simply an 'enabling' system embracing ambidexterity in terms of 'compliance and improvement' or 'efficiency and flexibility' would portray an inaccurate and partial representation of the system as interviewees also pointed to a number of coercive features related to constrained freedom, autonomy and transparency. Further, the examination of both design and use reinforces Dowling and Leech's (2014) view on the need to examine both phases of control systems in order to provide a comprehensive picture and fully understand its practical implications. Failure to address both phases bears the risk of delivering an incomplete understanding of control systems and perceived attitudes towards the system.

Thirdly, the study indicates that certain features of formalisation (i.e., repair, internal transparency, global transparency, flexibility) have different implications when applied to externally mandated control systems and the context of the public sector. Findings suggest that in contexts and organisational settings with multiple stakeholders and objectives like public sector organisations, rigid and highly structured processes such as hospital accreditation can still be used in an enabling way despite having many elements that resonate with the logic underpinning coercive formalisation. While Touati and Pomey (2009) warn decision makers of

the risks of introducing coercion into systems of accreditation, findings in my study suggest that certain coercive elements (very limited repair and flexibility) which would generally be viewed coercively in the context of an internal system (Ahrens and Chapman, 2004; Wouters and Wilderom, 2008) can in fact be viewed in a more neutral manner in the context of an external control system in the public sector as there is an acceptance of the inevitable existence of these coercive features for external control systems. Contrary to Adler and Borys' (1996) view that systems designed by external experts without the involvement of users will endorse a coercive logic (leading to negative attitudinal outcomes), my study indicates that external imposed systems can also encourage a more neutral attitude towards the system even when users are not involved in the design phases (a coercive feature).

Fourthly, and in connection to the previous argument, this study contributes to deepening our understanding of the importance of distinguishing between the bureaucratic form adopted in the design/use of the system and the perceptions of the system (Tessier and Otley, 2012). It illustrates how certain enabling features according to the theoretical framework such as the use of optional indicators ('non-essential' standards of the accreditation's manual) can be perceived negatively due to the additional work involved. Additionally, some features regarded as coercive such as limited access to information were not perceived negatively by interviewees because management adopted a teamwork approach where information was provided to hospital staff as needed. The reduced transparency associated with limited access to information did not have any undesirable effect on performance of work. Thus, this research provides empirical evidence to support Tessier and Otley's (2012) point that enabling and coercive features are distinct from positive and negative attitudes towards control.

Fifthly, contributes to the discussion about the nature of contemporary NPM tools. It demonstrates that regulatory pressures can force compliance with imposed performance measures (Lachmann et al 2016) and can facilitate a transitioning from an input-oriented focus to use of an all-embracing PMS which permeates large complex organisations combining an array of financial and non-financial indicators (Ballantine et al., 1998; Lehtonen, 2007; Aidemark and Funck, 2009). The study shows how comprehensive and balanced PMSs (in this case the hospital accreditation system in Catalonia) promoted by NPM reforms (Hyndman and

McGeough, 2008; Jansen, 2008) can take a highly bureaucratic form (i.e., 700 obligatory quality standards, extreme regulation), impose rigidity and reduce flexibility consistent with the negative outcomes of these systems emphasised in the literature (Greenfield and Braithwaite, 2008; Touati and Pomey, 2009) and evident in this study such as work overload and administrative burden, limited recognition and lack of financial incentives, limited support from government agencies, and the use of a single set of standards for all hospitals. However, as a result of this comprehensive regulatory system, findings showed that by compelling hospital staff to engage across internal boundaries, many positive effects resulted such as enhanced transparency, initiating a performance improvement dialogue. This increased engagement and dialogue resulted from greater information sharing and cooperation between the units comprising this public sector organisation, driven by the external regulatory system deadlines, in an effort to engage with and consider how to demonstrate improvement in the performance measure stipulated by the regulator. Linked to this co-existence of positive and negative outcomes of accreditation is the final contribution of the study on ambivalent attitudes discussed in the next paragraph.

Lastly, my study goes beyond the traditional view that associates coercive formalisation with negative attitudinal responses and enabling formalisation with positive attitudes (Adler and Borys, 1996) and contributes to recent literature highlighting the ambivalent views of employees towards formalisation (Adler, 2012; Ashcroft et al., 2014). Examples of this ambivalence included simultaneous positive and negative views of management towards certain features of the design and use of the accreditation system. For example, concurrent positive/negative attitudes towards the system were related to contrasting enabling/coercive repair and flexibility features of the design of the accreditation. Whereas the self-assessment tool, the freedom to select auditing firm, the possibility of contesting auditors' recommendations and the evaluation of non-essential standards were mainly perceived as positive due to its enabling nature, the limited autonomy for changes, the restricted capacity to express opinions, and the 'one size fits all' approach (Sax and Marx, 2014) were perceived negatively because of their coercive character. This mix of enabling and coercive features could explain why interviewees revealed positive and negative attitudes towards the accreditation

system at the same time. In addition, recent work of Ashforth et al. (2014) on ambivalence was useful to identify a number of triggers (i.e., hybrid identities, contradictory goals and role conflicts; dualities; multifaceted objects; and temporal factors) which were seen in the context of my study as potential factors activating simultaneous positive and negative attitudes. Particular characteristics of healthcare systems related to the multiplicity of stakeholders, contradictory character of objectives and external pressures (i.e., demographic, economic, political) were used to exemplify ambivalent attitudes of management towards the accreditation system.

Given the limited attention in the literature to the dynamics and interaction between enabling and coercive control (Free, 2007; Cools et al., 2008; Jordan and Messner, 2012), my study advances our understanding of how both types of control exist simultaneously within one system and the potential attitudinal responses of individuals towards such controls.

8.4 Practical implications

As part of the NPM reforms to modernise the public sector, the introduction of PMSs in healthcare such as the hospital accreditation system in Catalonia has promoted a growing adoption of medical standards (Triantafillou, 2014) and encouraged healthcare professionals (i.e., doctors and nurses) to learn and use management accounting tools in their daily activities (Kurunmäki and Miller, 2006). These initiatives aimed at improving medical practices and processes by means of measuring and managing performance have also created certain opportunities for collective learning. This section provides a number of practical implications for healthcare management at two different levels: users (senior management in hospitals) and designers (healthcare government department) of the accreditation system.

In terms of users, this research offers top management in hospitals new insights allowing them to develop a better understanding of the consequences of using the accreditation system as an enabling/coercive tool. It shows that while the system has certainly several constraining design features that cannot be avoided (i.e., limited autonomy for changes, restricted opportunities to express opinions and ‘one size fits all’ approach), there is management discretion in relation to the coercive or

enabling manner of use of the system. These include management decisions on access to information, communication with lower staff levels, feedback channels, managerial involvement, teamwork, and collaboration with external organisations. These elements are important because they allow managers to influence the way (enabling/coercive) the accreditation systems are used. The purpose of actions such as limited access to information and poor communication with lower hierarchical levels needs to be carefully considered in the context of promoting an enabling use of system by means of teamwork and collaboration. Despite the fact that participants in the two hospitals perceived that during the re-accreditation process in 2013-2014 management promoted a more enabling use of the system in terms of greater leadership and involvement, there is scope for further improvements in relation to the communication channels and keeping employees informed about developments and updates related to the accreditation process.

Hospitals should also consider requesting further feedback and additional incentives (economic and non-economic) from the government in order to implement faster corrective measures to improve quality management issues. On-going and specific feedback could help to improve the performance of hospitals by indicating areas which require further attention based on deficiencies of actual clinical processes and outcomes. The use of economic and non-economic incentives could also encourage higher performance. While economic incentives (i.e., higher activity in terms of surgeries) could be used to recognise those hospitals with higher efficiency in terms of resources, non-economic incentives (i.e., specialised training) could be used to motivate healthcare professionals who want to engage in continuous quality management activities. It would be worthwhile to explore the possibility of linking accreditation scores of hospitals to organisational funding to encourage the pursuit of both assurance and continuous quality improvement quality of services. Hospitals who demonstrate a willingness to invest in continuous quality improvement might be supported in their efforts to do so. Such investment might be seen by staff as recognition of their efforts to improve practices, processes and activities to improve the patient experience in their hospital.

In terms of design of the accreditation system, the government could take into account some of the following recommendations based on the findings in this study. The system shows a relatively even number of standards across the nine dimensions

(leadership, strategy, people, partnerships & resources, processes, clients' results, people results, society results, and key results); however, there are indications that some standards are more important than others. For example, there is a systematic repetition of standards evaluating activities in terms of "the organisation measures the number of updated protocols in the area of …" that increases the importance of protocols. The accreditation body should reflect on whether this was their intention as these could have been integrated into a single 'standard'. A large number of standards also related to the analysis of a single 'plan' (i.e., Human Resources Plan, Communication Plan, Information Management Systems Plan, and Strategic Plan) which could result in hospitals with poorly-developed organisational plans but appropriate medical processes could fail to achieve a good score. This may or may not be appropriate and consideration should be given to which standards are of most importance for regulation and quality improvement. In addition, some standards seem to require higher effort and resources in comparison to others despite the fact that the accreditation system gives the same value of 1 point to each of the 696 essential standards. The creation of the Strategic Plan, for example, can be very complex and demanding but it has the same importance as some non-medical processes which could be argued to be less relevant such as the sustainable management of buildings, equipment, materials and natural resources.

In some situations it appears that there is a weak alignment between the objectives pursued by the hospitals and the accreditation body. While Hospital L, for example, emphasises the value of research and teaching as top priorities, the accreditation body seems to be less enthusiastic to promote and evaluate standards related to such issues. Additionally, a close analysis of the accreditation manual shows a high emphasis on the maintenance and production of records leading to increased workload and paperwork. Although participants pointed out that records in the hospital context are extremely important and documentation helps to objectify measures and indicators, it also runs the risk of supporting bureaucratic practices based on formalised written documents rather than best clinical practices and results. Most hospitals still follow traditional structures focused on medical specialisation, but to better respond to actual needs of patients, clinical activities and care pathways should be centred on the overall journey of the patient.

Furthermore, consideration needs to be given to the adequacy of the 65% 'pass' score and whether the system should also require a minimum 'pass' percentage for each of the nine dimensions. Although the pass score has been increased from 60% to 65% between the last two accreditation processes, the high scores of Catalan hospitals in the last accreditation process in 2013-2014 indicate that maybe the system is no longer challenging. Theoretically, a hospital can also fail all the 'results' standards (groups 6 to 9 – clients results, people results, society results, and key results) but pass the overall accreditation assessment if the scores from groups 1 to 5 (based on 'structures' and 'processes') are excellent as these five groups represent almost 80% of the standards.

Finally, consideration should be given by the Health Department to the possibility of designing a more flexible system where some specific features can be adapted to the needs and particularities of the different types of hospitals. This should ameliorate the current coercive nature of 'one size fits all' approach (Sax and Marx, 2014) and improve the motivation of hospital staff as the current model does not give adequate attention to some critical services offered by hospitals. Participants in Hospital L, a large tertiary hospital, felt that the system is not completely fair as it did not capture some valuable activity taking place in the hospital given the accreditation system's limited focus on technological developments, research activities, and teaching and training of future clinicians and nurses.

8.5 Strengths and limitations

This section outlines the strengths and limitations of my research. Regarding strengths, the study builds on multiple strands of literature including healthcare accreditation, public sector, management control and enabling/coercive formalisation to examine how control systems are designed and used. It focuses on particular on the design and use of an external MCS (accreditation) on which there is a dearth of literature.

As indicated in Chapter 4, a rigorous approach was followed for data collection and analysis to minimise issues of reliability and validity (i.e., data management, interview protocols, informed consent, and transcription of interviews). Many of the findings were corroborated using different data collection methods to provide a

comprehensive picture and enhance the confidence of the reader in the presentation of results (Ahrens and Chapman, 2006b). The perceptions of interviewees regarding certain accreditation standards were validated by accessing other data sources such the accreditation manual. Findings from multiple sources of data were reported in the findings chapters. For example, numerical codes for 'essential' standards (i.e., 5d-02-D-16-E, 9c-01-02-02-E, 9c-01-02-04-E, 9c-01-02-10-E, 9c-01-02-11-E) and 'non-essential' standards (5d-02-D-17-Q, 9c-01-02-03-Q, 4c-02-D-11-Q) were used in Chapter 6 by the researcher to reinforce the view of the Medical Director of Hospital L on emergency services standards. A thorough review of these standards after the interview was critical in recognising the complexity of managing A&E services and other related departments in relation to cost/quality objectives.

In-depth fieldwork comprising qualitative data collection methods were also helpful in investigating management attitudes towards control. The interview findings related to accreditation were crucial for recognising the simultaneous presence of positive and negative attitudes of management towards the system. For instance, in Chapter 6 the Economic & General Services of Hospital S portrayed the accreditation system as "advantageous inconvenience" which gave coherence and support to use the concept of ambivalence (Merton, 1976; Adler, 2012; Ashforth et al., 2014) to describe situations where individuals had mixed feelings or orientations towards an object. Using a qualitative approach was invaluable in recognising unexpected outcomes such as ambivalent attitudes supporting the importance of qualitative research for investigating complex issues.

The inclusion of two hospitals is also seen as a strength for analytical and theoretical generalisation purposes rather than population generalisation. Findings from the case studies can be generalised to similar settings (i.e., public organisations like universities) under similar theoretical views. Overall, in-depth methods of data collection approaches were helpful to achieve a better understanding of the relationship between design and use of control (Abernethy et al., 2007; Berry et al., 2009) and how externally designed quality systems were used in organisations.

Regarding limitations, the interpretation of findings of this study requires certain caution due to a number of shortcomings inherent in the reliability and validity of data using a qualitative approach. The potential interviewer bias, the reliability of

the interpretation of transcripts, and the validity and generalisability of findings are noted in Chapter 4 as potential downsides of qualitative studies. For example, the process of data analysis includes to a certain extent choices that can be subject to potential interpretative and analytical bias atttibutable to the researcher´s own perceptions and personal experience. The fact that the interviews were recorded in two different languages (Spanish and Catalan) and the transcripts had to be translated into English language increased the complexity of the research analysis process. It is also acknowledged that some views and perceptions of the interviewees regarding changes between the last two accreditation processess (2007-2008 vs. 2013-2014) may have been impacted by memory recall bias as a longitudinal approach was not adoped. Despite the fact that the potential for bias cannot be completely eliminated, the rigorous and methodical approach adopted in the study provides assurance that bias is not a significant concern. For example, a number of steps including data triangulation, audit trail of processes and materials, multidimensional analysis and verifications from respondents were adopted to enhance validity in terms of data extraction and analysis.

Another limitation is that the study has been primarily focused on the perceptions of management (i.e., top managers and to a lesser extent some middle managers). For example, interviews in Hospital S were only carried out with the top management team (i.e., all the directors) and the quality coordinator because other individuals were reluctant to be interviewed or taped. Conclusions can only be drawn in relation to these levels of management and no inferences are made in relation to perceptions of healthcare professionals at lower hierarchical levels. This is important because the adoption of modern methods like accreditation could differ from traditional and well-accepted clinical practices, and it generally involves changes in values, beliefs and behaviours deeply established in the culture of hospitals. Whereas nursing staff have been found in previous research to be more favourably inclined towards the accreditation process showing high commitment and enthusiasm, medical professionals seem to have shown less engagement with the overall process (Pomey et al., 2010; Alkhenizan and Shaw, 2012). Despite the very limited number of interviews with nursing and medical staff in my study, significant commitment and involvement were observed by both professional groups, particularly nursing staff (as indicated in the findings chapter Section 6.4.3).

In relation to the enabling/coercive framework, it is also critical to investigate the perceptions of healthcare professionals based on the fact that formal controls can be perceived differently by different people (Alder and Borys, 1996; Tessier and Otley, 2012). Relationships between management and healthcare professionals are likely to be problematic since both groups have normally struggled to manage certain factors associated with power, trust and autonomy as medical staff has typically enjoyed its own autonomy in terms of professional regulation and standards (Wardhani et al., 2008). It may be the case that some specific groups of healthcare professionals such as physicians who benefit from higher autonomy compared to other groups (i.e., nurses) may be less favourably disposed towards a restrictive mechanism like accreditation that limits their own judgement and skills.

In the context of this study, a number of differences between top managers and healthcare professionals were noted. For example, communication with lower level staff in Hospital S was pointed out as a problematic issue. The Nursing Director admitted that information was poorly communicated down in the hospital and limited feedback was given to lower levels which resulted in nursing staff perceiving the analysis of processes and indicators for the accreditation as an extra obligatory task rather than an improvement opportunity for their daily job activities. The Human Resources Director indicated that there was also a 'cultural' barrier in place because employees always expected to be told what to do next and did not show much interest and motivation to learn why the hospital was developing some specific activities and processes to improve the quality and safety of services. Additionally, the managerial approach in relation to the accreditation system resulted in different perceptions at top and lower levels. The Economic Management Manager in Hospital L recognised that the accreditation system was primarily used at top management level and maintained that individuals at lower levels were only concerned with their own responsibilities and did not pay much attention to the global managerial vision of the accreditation system.

Therefore, it is important to emphasise that healthcare professionals such as clinicians and nurses are clearly under-represented in my study. Findings should be taken with caution as differences between managers and healthcare professionals might be expected. Further interviews with healthcare professionals at lower levels could provide deeper insights on enabling/coercive formalisation and

positive/negative attitudes towards the system to evaluate for example some elements which could be open to different interpretations such as the overall acceptance of the system and lack of resistance (professed by managers at top level).

An additional limitation of this study is that the researcher was not part of a team for data collection purposes and all data was collected by the researcher working on his own. Working in conjunction with a research team in the field would have offered possibilities of collecting further data, particularly, in terms of conducting more non-participant observations. Furthermore, findings are limited to the context and experiences of the two hospitals investigated. The organisational context of this research refers to acute care hospitals in a specific region of Spain relatively different from other regions (where the proportion of public hospitals is higher and accreditation is not always mandatory) and, thus results should be interpreted in light of the Catalan context.

Finally, another limitation of this study is that the analysis of the 'design' of the current accreditation is based on 'ex post' experiences as the system was designed and implemented before the researcher entered the field. As previously described in Chapter 5 the current acute care hospital accreditation system was designed and implemented for the first time around ten years ago. Although design issues explored in this research are sometimes based on past perceptions and opinions of respondents with the system, the researcher has applied appropriate measures to minimise the risks of bias and subjectivity (as described in Chapter 4), particularly when respondents compared their personal experiences between the last two accreditation processes.

8.6 Future research

Based on the comprehensive analysis of findings, discussion of findings and strengths/limitations of this study, future research could investigate the following areas.

Firstly, as mentioned in the previous section more in-depth field studies expanding the scope of the research to healthcare professionals at lower staff levels (i.e., doctors and nurses) could examine the perceptions of these individuals towards the

system to provide more insights about the implications of 'hybrid' models like accreditation for healthcare professionals. A greater focus on the perceptions and views of healthcare professionals (medical and nursing) at lower levels is important in the context of hospitals because this collective represents not only the largest group of employees, but also a group with vast knowledge of dealing with efficiency issues and quality processes related to the accreditation system. Focusing on this group has the potential for increasing our understanding of what types of expenditures are most effective and identifying situations where the association between quality and cost may be nonlinear. A nonlinear relationship between cost and quality has been pointed to in the literature where the quality benefits of extra resources deteriorate and ultimately become negative with growing costs (Hussey et al., 2013). Additionally, further studies could investigate the role of the quality/coordinator as a catalyst between top management and middle/low management. The views of specialised staff groups or individuals like the quality manager could provide useful insights to better understand the relationship between the enabling logic (i.e., increased transparency through hierarchical levels and departments) and how information and feedback are communicated using top-down and bottom-up channels.

Secondly, further work on enabling/coercive formalisation is needed to tailor this framework for external control systems. Even though Adler and Borys (1996) used examples of TQM and ISO standards to develop the foundations of the enabling/coercive framework, their view on such quality management systems was primarily focused on internal formalisation rather than external formalisation. As indicated in my study, the characteristics of external control systems are very different from internal control systems, particularly when external control systems are imposed on organisations as the potential for some features of the enabling/coercive formalisation such as repair and flexibility to exist may be limited. In the context of external control systems, aspects such as legitimacy and power asymmetries are critical for understanding the interests and objectives of different actors in promoting/discouraging enabling features. Insights from institutional theory could help to develop new ideas and linkages around the suitability and usefulness of the enabling/coercive framework in public sector organisations. Additionally, research using the enabling/coercive framework could

also compare performance of accredited public hospitals vs. accredited private hospitals to gain insights into the mandatory vs. non-mandatory nature of accreditation in the context of Catalonia. Although accreditation was not compulsory for private hospitals, there were a small number of these hospitals which decided to carry out the accreditation process. It would be useful to learn more about their views on the enabling/coercive features of the system and their attitudes towards the system. Lessons learnt from recent studies in educational settings like universities (Cooper et al., 2014; Ahrens and Khalifa, 2015) where accreditation is not compulsory could also provide fruitful insights into how hospitals can manage twofold objectives.

Thirdly, in relation to the enabling/coercive framework, research can also investigate how organisations shift between enabling/coercive formalisation to understand potential attitudinal changes of individuals towards control. Studies examining moves from enabling to coercive formalisation (i.e., Jordan and Messner, 2012) and vice versa are needed to evaluate control implications for management and employees and understand how systems might still retain a relatively balanced mix of both enabling and coercive features of formalisation. This line of research runs in parallel with recent studies exploring how individuals respond to ambivalence towards control in order to advance current understanding of situations that involve simultaneous positive/negative attitudes or neutral responses towards control. Although findings in this research point to the presence of ambivalence when systems combine a mix of enabling and coercive features, more studies are needed on the triggers of ambivalence. Ashforth et al. (2014) identified four triggers (i.e., hybrid identities, contradictory goals, and role conflicts; organisational dualities; multifaceted objects; and temporal factors) and findings in my study support the presence of these triggers. Furthermore, an analysis of 'individual vs. collective' ambivalence could be useful to identify potential differences in the drivers that trigger ambivalence at these two levels, particularly in the hospital setting where different groups or collectives might hold different interests.

Fourthly, although research on contemporary healthcare performance management underlines the capacity of some instruments like the Balanced Scorecard to enhance hospital performance (Gurd and Gao, 2008; Aidemark and Funck, 2009), it is also

expected that various unintended or dysfunctional behavioural effects could emerge (Llewellyn and Northcott, 2005; Bevan and Hood, 2006; Kelman and Friedman, 2009; Lapsley, 2009; Mannion and Braithwaite, 2012). Following Mannion and Braithwaite's (2012)[66] classification of unintended consequences in the U.K. National Health System, further studies could investigate the intended/unintended consequences of accreditation systems. For example, interviewee findings on a decline in motivation levels over time due to the increasingly challenging nature of the process, revealed some parallels with prior studies in the healthcare accreditation (Pomey et al., 2010) and whether making hospitals results publicly available was an appropriate strategy (Mumford et al., 2013). Further analysis of concerns associated with an overemphasis on only measures assessed in the accreditation model (i.e., tunnel vision), the complexity to capture social phenomena like culture and staff morale (i.e., quantification privileging), and the lack of economic/non-economic incentives and recognition (i.e., undercompensation) could help to improve the design of future accreditation systems.

Finally, there is scope for quantitative studies to obtain broader and more generalised findings on some of the issues raised in this study. As this line of research on enabling/coercive formalisation of external control systems is new to the literature, further research could investigate the applicability of the framework across other public sectors facing similar challenges. This could allow an examination of differences in terms of institutional context and control characteristics which could provide additional insights into complex areas like ambivalence. Up to now quantitative research adopting this framework has been limited (i.e. Naranjo-Gil and Hartmann, 2006; Chapman and Kihn, 2009: Hartman and Maas, 2011; Mahama and Cheng, 2013; Naranjo-Gil et al., 2016).

[66] Mannion and Braithwaite classified twenty different types of unintended effects in the U.K. National Health Service in four groups: *poor measurement* (measurement fixation, tunnel vision, myopia, ossification, anachronism and quantification privileging), *misplaced incentives and sanctions* (complacency, silo-creation, overcompensation, undercompensation, insensitivity and increased inequality), *breach of trust* (misrepresentation, gaming, misinterpretation, bullying, erosion of trust and reduced staff morale), and *politicisation of performance systems* (political grandstanding and creating a diversion).

8.7 Chapter conclusion

This study investigated the acute care hospital accreditation system of two public hospitals in Catalonia using qualitative data. This study identified accreditation as a NPM tool, driver for change and a catalyst for quality assurance and quality improvement suggesting that the system is turning into a 'hybrid' model that combines features of both approaches. Additionally, this research contributes to the enabling/coercive framework by examining its suitability in the context of understanding users' perceptions of externally mandated control systems in a public sector setting. The literature to date which has used Adler and Borys' (1996) framework has done so in the context of internal MCSs. Findings suggest that in the context of externally mandated systems, certain features of enabling/coercive have less relevance than in the context of an internal system as there is no expectation among management that these features would be present. The enabling/coercive framework was helpful in identifying and also describing the simultaneous presence of positive and negative attitudes of individuals towards control systems. Examples of this ambivalence included opposing views on 'design' and 'use' of the four features integrated in the enabling/coercive framework.

In addition to addressing the research questions and summarising findings and contributions, this chapter acknowledges its practical implications, strengths and limitations, and opportunities for further research. Findings from this study have shown that healthcare is a complex topic where cost and quality objectives are becoming increasingly intertwined. There is a greater than ever need and demand for academics, researchers, hospitals, and healthcare government institutions to act together to address the contemporary challenges and facilitate future research. The accreditation system could be perceived as a 'tick the box' approach which offers a 'snapshot' of the quality performance of public hospitals. However, after completing the interviews and analysing relevant documentation, this study reveals that the accreditation system is an integrated and comprehensive system which, while well-accepted by users, can be improved.

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APPENDICES

APPENDIX A: Summary of positive/negative effects of accreditation based on a review of healthcare accreditation studies

POSITIVE EFFECTS	NEGATIVE EFFECTS
- Increases compliance with quality & safety standards - Promotes changes at 'individual/professional' level: encourages professional development, provides educational benefits (i.e., training, sharing of best practice) and increased job satisfaction - Promotes changes at 'departmental and organisational' level: encourages communication, collaboration and learning opportunities both *'internally'* (teamwork, interdisciplinary team effectiveness, integration and use of information through codification of policies and processes, enhanced leadership) and *'externally'* (decreases practice variance among providers and decision-makers, promotes use of ethical protocols, clearer vision for sustainable initiatives, higher involvement of patients and families) - Promotes a 'culture' of quality and safety - Supports management of quality improvement and enhanced efficiency through reduction of unnecessary costs (i.e., reduction of medical errors, analysis of adverse effects), adoption of internal practices/processes aimed at improving operational effectiveness (i.e., reliable documentation in medical/administrative records) and consciousness on the use of resources (i.e., medication) - Ensures better quality of services as a result of improved processes (i.e., evidence-based and standardised care) and resource management (i.e., planning and organisation of hospital resources) - Increased patient satisfaction - Improves hospital image: public recognition, reputation, confidence and attractiveness to public - Provides opportunities for additional funding - Increased accountability and legitimacy of the process	- Routinisation and bureaucratisation of practices - Deterioration of individual and professional conditions due to work overload (i.e., increased documentation and paperwork) and administrative burden - Potential for opportunistic behaviour (i.e. gaming) - Limited recognition - After a number of similar accreditation cycles, organisations find the process no longer challenging - Funding cuts and decrease on resources The following obstacles related to the design, implementation and use of healthcare accreditation programmes are also seen as drivers capable to generate negative effects: - Organisational culture of resistance to change - Insufficient organisational training - Limited support and participation from certain healthcare groups (i.e., doctors participation) - Lack of applicable standards for local use due to single set of standards - Lack of (financial) incentives - High costs to sustain accreditation programmes - Program incongruence with organisational objectives (i.e., hospital mission deviation) - Judgmental nature of surveyors

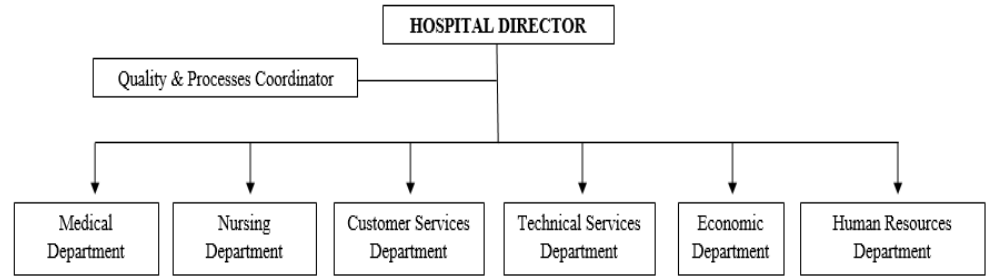
Own source based on an extensive analysis of key studies and literature reviews within the healthcare accreditation domain (Cerqueira, 2006; Shaw, 2006; Greenfield et al., 2007; El-Jardali et al., 2008; Greenfield and Braithwaite, 2008; Nicklin and Dickson, 2009; Touati and Pomey, 2009; Pomey et al., 2010; Alkhenizan and Shaw, 2011, 2012; Braithwaite et al., 2011; Flodgren et al., 2011; Greenfield et al., 2012a; Hinchcliff et al., 2012; Mumford et al., 2013; Jaafaripooyan, 2014; Ng et al., 2014; Brubakk et al., 2015; Nicklin, 2015).

APPENDIX B: Information related to Hospital S

Activity levels and budget figures[67]

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total discharges	3300	3350	3800	4000	4350	4300	3850	4000	3700	3550
Total major surgeries	2700	2800	2850	2850	3400	3550	3450	3450	3700	3859
Total emergencies	33000	36000	37000	32500	32500	32000	30000	30000	29500	30000
Total external visits	53000	54500	56500	62000	68000	67500	60000	62000	62500	62500
Total personnel	230	240	280	290	300	310	280	270	270	270
Total beds	100	100	100	100	100	100	95	95	95	95
Income (millions euro)	12,2	14,3	16,4	17,3	18,6	19,2	17,7	17,9	17,5	17,1
Expenses (millions euro)	12,1	14,2	16,1	17,6	18,6	18,9	17,4	17,4	17,4	17,1

Organisational chart



Medical Department → Two areas: Healthcare Services Secretary and Document Management and Medical services / Sixteen departments: General Surgery, Anaesthesia, Pharmacy, Gynaecology, Haematology, Emergencies, etc.

Nursing Department → Four areas: Hospitalisation, Operating Room, Social Health Care, Emergencies

Customer Services Department → Two areas: Admissions and Outpatients

Technical Services Department → One area: Information Technology

Economic Department → Six areas: Accounting, Invoicing, Purchasing, Maintenance, Suppliers – Mutual Insurance companies, General Services (Laundry, Catering and Cleaning)

Human Resources Department → One area: Healthcare Monitoring Unit

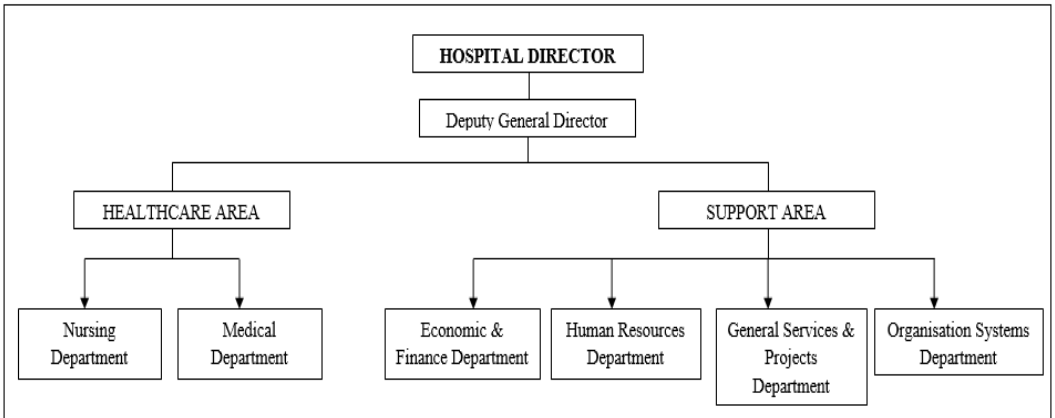
[67] Figures related to activity levels and budgets have been slightly distorted to safeguard the identity of the hospital. However, they reproduce in an approximate but trustworthy manner the key figures of the organisation.

APPENDIX C: Information related to Hospital L

Activity levels and budget figures[68]

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total discharges	33500	31500	32500	33500	35000	32000	29500	29000	31500	33000
Total major surgeries	20000	20500	20500	21000	19000	17500	16000	16500	16500	17000
Total emergencies	130000	130000	127000	125000	125000	117000	103000	91000	93000	93500
Total external visits	500000	505000	502000	499000	498000	490000	477000	465000	478000	485000
Total personnel	4450	4450	4400	4200	4100	4000	3900	3850	3600	3500
Total beds	850	850	820	820	800	780	770	760	650	610
Income (millions euro)	228	245	270	295	322	320	300	285	280	283
Expenses (millions euro)	230	248	279	299	322	323	304	286	282	284

Organisational chart



Nursing Department → Two areas: Outpatient & Support (five services) and Hospitalisation & Surgery (ten services)

Medical Department → Four areas: Outpatients (twelve services, i.e., Pharmacy, Emergencies, Psychiatry), Medical (seven services, i.e., Neurology, Infectious diseases), Surgery (ten services i.e., Plastic surgery, Urology) and Medical Coordination (six services, i.e., Research, Teaching, Quality)

Economic & Finance Department → five areas: Invoicing, Economic Management, Accounting, Contracts, and Logistics-Supplies-Purchases

Human Resources Department → five areas: Professional Development, Payroll and Social Security, Personnel Administration, Basic Prevention Unit, and Ongoing Training

General Services & Projects Department → five areas: Technical Department, Maintenance, Hospitality, Security, and Clinical Engineering

Organisation Systems Department → three areas: Technical Secretary (Codification, Technical Support, Data evaluation & Quality), Information Technology (Systems and Communications, Functional Area, Service Desk, Data Warehouse) and Ancillary & Concierge Services

[68] Figures related to activity levels and budgets have been slightly distorted to safeguard the identity of the hospital. However, they reproduce in an approximate but trustworthy manner the key figures of the organisation.

APPENDIX D: Interview guide - Accreditation

Presentation of my research and its purpose / Asking permission to record it / Confidentiality and anonymity issues

Date: _____ Centre: _____ Interview number: _____

1. To begin with, could you explain your actual position and work at this hospital?

2. Could you please tell me what is your understanding of the accreditation process of the hospital?

a) What do you think is the most important outcome the accreditation is trying to achieve?

b) What role does the accreditation process play in managing your department?

Probe: measurement, evaluation, compliance to regulation, benchmarking...

c) Is there a hierarchy of objectives, if so – can you describe it?

Probe: structure/processes/results / The 9 dimensions

e) What happens when performance targets related to the accreditation process are not meet?

Probe: budget reductions, re-assessments...

f) How does accreditation help in dealing with the management of cost and quality objectives?

i) Can you provide an example of quality improvement due to the accreditation?

ii) Can you provide an example of cost reduction due to the accreditation?

iii) Can you provide an example of simultaneous quality improvement and cost reduction due to the accreditation?

3. How much information about the accreditation measures is available / accessible for your department? (I)

4. Who decides the number of measures to be revised in your department? (R)

5. How frequently are measures revised? (R)

a) Can you provide an example of the last time you revised a measure?

b) Why it was revised?

6. How much freedom is given to revise performance measures? (F)

7. How often is feedback on key measures given to employees in your department? (I)

8. To what extent does the accreditation allow shifts / changes from programmed (original) plans to new objectives? (F)

9. How does the accreditation system make it possible to deal with any unexpected problems related to performance measurement? (R)

a) How easy / difficult is it to modify information when facing problems? (R)

b) Why is that easy / difficult? (F)

c) Under what circumstances can you use your own judgement? (R)

d) Under what circumstances do you need to contact your superiors? (R)

10. How much support is given by your superiors during the accreditation process? (R)

11. Can you provide any examples where your superiors did not authorise the modification of certain measures related to the accreditation? (F)

12. Does the hospital have any process for promoting suggestions, ideas or new ways of doing things related to the accreditation? Can you provide an example? (G)

13. To what degree does the accreditation system improve your knowledge about the operations carried out in your department? (I)

14. How do different departments cooperate to communicate or share information related to the accreditation process? (G)

15. What is the level of influence of your department during the accreditation process compared to other departments? Can you provide an example to illustrate this? (G)

16. To what extent does the accreditation system help to communicate the objectives pursued by the hospital? (G)

17. To what degree is the accreditation system able to promote areas for improvement related to performance management? Can you provide an example? (G)

18. How does the accreditation system impact on transparency within your department? And between the departments? (I + G)

19) Overall, what are the major strengths of using this performance measurement system? What (if any) are the major weaknesses? How could its use be improved?

20. Finally, are they any other aspects of the accreditation system which I have not covered which might be relevant?

Enabling-coercive framework (Adler and Borys, 1996):

Repair (R) → Using own judgement to make necessary and appropriate adjustments to prescribed rules and protocols; *Flexibility* (F) →The system provides different choices and alternatives; *Internal transparency* (I) → Better understanding of your department; *Global transparency* (G) → Better understanding of the hospital's strategy and objectives

APPENDIX E: Number of interviews carried out in the two hospitals & other healthcare organisations

Date	Job description - HOSPITAL 'L'	Job description - HOSPITAL 'S'	Time (min) ***Recorded*** / *Non-recorded*
	-Preliminary interviews-		
03/05/2012	Administration & Finance Director		60
03/01/2013		Hospital Director	60
08/01/2013	Administration & Finance Director		45
	-1st phase of data collection (Jun-Aug 2013)-		
19/06/2013	Assistant Director Human Resources *(1-1-1)*		**76** + 15
20/06/2013	Maintenance Manager *(1-2-2)*		**28** + 15
20/06/2013	Information Systems Director *(1-3-3)*		**13** + 5
21/06/2013	Nursing Head of Quality & Safety + 2 nurses *(1-4-4)*		**37** +15
26/06/2013	Assistant Director Human Resources *(2-1-1)*		**58** + 15
01/07/2013	Technical Office Manager + Technical Office Assistant *(1-5-5)*		**42** + 60
04/07/2013	Medical Director *(1-6-6)*		**62** + 15
05/07/2013		Hospital Director	60
09/07/2013	Assistant Director IT Systems *(1-7-7)*		**54** + 15
10/07/2013		Hospital Director *(3-1-1)*	**39** + 10
15/07/2013		Medical Director *(3-2-2)*	**34** + 15
15/07/2013		Nursing Director *(3-3-3)*	**38** + 15
15/07/2013		Human Resources Director *(3-4-4)*	**60** + 15
18/07/2013		Technical Services Director *(3-5-5)*	**45** + 25
18/07/2013		Costumer Services Director *(3-6-6)*	**29** + 15
18/07/2013		Economic & General Services Director	**45** + 15
01/08/2013	Administration & Finance Director	*(3-7-7)*	40
	-2nd phase of data collection (Jan-May 2014)-		
04/02/2014		Quality Coordinator *(3-9-9)*	**49** + 15
19/02/2014		Human Resources Director *(3-11-4)*	**43** + 20
21/02/2014		Costumer Services Director *(3-12-6)*	**25** + 15
21/02/2014		Economic & General Services Director *(3-13-7)*	**36** + 15
24/02/2014		Nursing Director *(3-14-3)*	**37** + 30
24/02/2014		Technical Services Director *(3-15-5)*	**30** + 30
24/02/2014		Medical Director *(3-16-2)*	**22** + 5
25/02/2014	Billing Manager *(1-8-8)*		**10** + 45
25/02/2014	Accounting Manager *(1-9-9)*		**26** + 120
26/02/2014	Economic Management Manager *(1-10-10)*		**94** + 50
27/02/2014	Logistics & Purchases Manager *(1-11-11)*		**123** + 30
28/02/2014	Administrative Contracts Manager *(1-12-12)*		**10** + 30
17/03/2014	Quality Manager *(1-13-13)*		**63** + 120
27/03/2014	Hospital Deputy Director *(1-14-14)*		**13** + 30
07/04/2014	Medical Director *(1-15-6)*		**43** + 20
09/04/2014	Nursing Director *(1-16-15)*		**20** + 10
24/04/2014	Administration & Finance Director		90
25/04/2014		Quality Coordinator *(3-18-9)*	**13** + 45
25/04/2014		Hospital Director *(3-19-1)*	**13** + 30
	Total interviews HOSPITAL 'L' = 21	**Total interviews HOSPITAL 'S' = 18**	
	-Other related interviews related to this study-		
27/04/2012	Executive Director (Hospital M)	Preliminary interview	70
05/08/2013	Executive Director (Hospital M)	First phase	45
03/01/2014	Applications Systems Manager (Hospital M)	Second phase	60
08/01/2014	Quality & Accreditation Director (Health Department)		20
27/01/2014	Institute Director ('Health' Institute)		60
30/01/2014	Quality & Accreditation Director + 2 committee members (Health Department)		120
05/02/2014	Foundation Director ('Health' Foundation)		120
17/02/2014	Auditing firm surveyor *(A-1-1)*		**30** + 15
08/04/2014	Quality & Accreditation Director + 2 committee members (Health Department)		180
12/05/2014	Quality & Accreditation Director (Health Department)		45
13/01/2015	Quality & Accreditation Director) + 1 committee member (Health Department)	Second phase	
Total Interviews = 50			

APPENDIX F: Participant information sheet & Consent form

March 2013

PARTICIPANT INFORMATION SHEET

Title of Project: Managing performance in difficult times: The challenge of balancing cost control and quality improvement in Spanish public hospitals

Researcher: Miguel Perez

Research objective: To examine how healthcare organisations manage the tension between conflicting objectives of cost control and quality enhancement. Particular attention will be given to exploring how Management Control Systems such as Performance Management and Measurement Systems can develop effective mechanisms to accomplish the projected strategic objectives. This research is being undertaken by the researcher for the purpose of completing a PhD at the National University of Ireland, Galway.

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. This Participant Information Sheet will tell you about the purpose, risks and benefits of this research study. If you agree to take part, we will ask to ask you to sign a Consent Form. If there is anything that you are not clear about, we will be happy to explain it to you. Please take as much time as you need to read it. You should only consent to participate in this research study when you feel that you understand what is being asked of you, and you have had enough time to think about your decision.

Thank you for reading this.

Purpose of the study and your involvement: This research aims to explore how healthcare organisations manage the tension between conflicting objectives of cost control and quality improvement. In particular, this study will examine how different components of Management Control Systems such as Performance Management and Measurement Systems can assist managers in their daily operations.

This investigation will seek to determine the manner in which management involved in control activities of decision-making and performance management accomplish the expected strategic objectives and targets. For this reason, the analysis of different performance measurement instruments is critical for understanding how hospitals balance conflicting objectives of cost and quality.

You have been asked to participate as a member of the management and/or operational team of your organisation to assist in developing the understanding necessary to complete this investigation. You were identified by your senior management team as a person best placed to provide valuable insights of actual systems, processes and practices.

The purpose of this study is to contribute to an enhanced comprehension of the current management practices and challenges in the healthcare performance management field. It is expected that this research will enable the researcher to contribute to the healthcare accounting literature through the dissemination of any insights and understandings gained through the publication of findings in peer academic journals.

What your involvement will entail: *Although your organisation has agreed to participate in this study, it is up to you to decide whether or not to take part. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect your rights in any way.*

In taking part in this investigation you are agreeing to being interviewed by the researcher to explore the subject matter of the research. All information and data collected during the course of this research will be kept strictly confidential and it will not be shared with anyone else. The information collected will be stored in a way that it will protect your identity. The recordings will be transcribed for analysis and after this process your approval will be needed to corroborate the validity of the findings. Original recordings will be securely stored for six years in the university premises after which they will be destroyed. Results from this investigation will be reported as group data and it will not recognise your identification in any way; however, some of your references and comments may be referred to in an anonymised manner in whole or in part in the final research document.

Each interviewed is expected to last approximately between sixty to ninety minutes. Follow up interviews and further documentation may be requested for clarifying some topics.

Further information: Please contact:

Miguel Perez (Researcher)

J. E. Cairnes School of Business & Economics

National University of Ireland, Galway

Tel: 0871179817

Email: m.perez2@nuigalway.ie

We thank you for your collaboration and participation in this study which is greatly appreciated.

All participants will be given a copy of this information sheet together with the signed consent form

If you have any concerns about this study and wish to contact someone independent and in confidence, you may contact 'the Chairperson of the NUI Galway Research Ethics Committee, c/o Office of the Vice President for Research, NUI Galway, ethics@nuigalway.ie

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Consent form

Centre number: **Participant number:**

Interview number:

CONSENT FORM

Title of Project: Managing performance in difficult times: The challenge of balancing cost control and quality improvement in Spanish public hospitals.

Researcher: Miguel Perez

Please initial box

1. I confirm that I have read the information sheet dated ……. (version ……) for the above study and have had the opportunity to ask questions. ☐

2. I am satisfied that I understand the information provided and have had enough time to consider the information. ☐

3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my legal rights being affected. ☐

4. I agree to take part in the above study ☐

Name of Participant: Date: Signature:

Name of Person taking consent: Date: Signature (if different from researcher):

Researcher: Date: Signature:

Copies: 1 for participant, 1 for researcher, 1 to be kept with research notes

APPENDIX G: Documents related to the accreditation system

General documents
- Acute Care Hospital Accreditation Standards Manual 2013-2014 (300 pages) - Acute Care Hospital Accreditation Standards Manual 2007-2008 (481 pages) - Orientation guide for hospitals (20 pages) - Hospitals accredited 2007-2008 (3 pages) - Hospitals accredited 2013-2014 (3 pages) - Standards evaluation algorithm for calculation of 'results' dimensions (2 pages) - Perceptions measures for criterion 6a (1 page) - Standards evaluation (1 page) - Self-assessment tool 2007-2008 (Excel) - Self-assessment tool 2013-2014 (Excel)
Hospital S
- Protocols specially designed for the accreditation: sedation (31 pages), endoscopy sedation multidisciplinary team (6 pages), admissions (33 pages), basic concepts (27 pages), outpatient visits and tests (19 pages), electromyogram (3 pages), external tests (14 pages), and breath test (4 pages) - Information Management Plan: organisational information needs, type of information used, distribution of information, data collection tools, and storage of information (23 pages) - Conference PowerPoint presentation related to the evaluation of the effectiveness in pressure ulcers treatments: efficiency improvement and costs reduction after the implementation of a new protocol and processes (52 slides) - Activity scorecard report for 2013 (42 pages) - Cost evaluation for different activity centres for 2011-2012: analysis of direct/indirect costs and budget comparisons (Excel) - Institutional Index: summary of all the institutional documents including existing protocols, consent forms, etc. (Excel) - Complaints register (Excel)
Hospital L
- Distribution of standards (n=45) across the five Administration & Finance departments: Accounting, Billing, Logistics & Purchases, Economic Management and Administrative Contracts (4 pages) - Auditing firm report after evaluation which includes the analysis of the nine dimensions: Leadership, Strategy, People, Partnerships & Resources, Processes, Clients results, People Results, Society Results, and Key Results (26 pages) - Internal report related to the accreditation process: self-assessments, planning process and distribution of standards (8 pages) - Two reports related to the Action Plan for 2008-2011: 88 improvement actions implemented after the first accreditation process in 2007-2008 (36 pages) - Quality indicators of the 'Hospitalisation' area (provided by the Nursing department) related to the accreditation evaluation process: 65 indicators including, for instance, patient satisfaction, complaints, pain evaluation, falls, medication management, protocols compliance, infections, and ulcers (7 pages) - General Clinical Safety Scorecard indicators for 2010-2013: divided by departments and including mortality, complications, readmissions, infections, falls, care delay, hands hygiene, and injuries (10 pages) - Detailed Clinical Safety Scorecard indicators for 2011 (3 pages) - Quality indicators for Digestive Surgery Services for 2009-2013: 65 indicators and 36 areas analysed (7 pages)

APPENDIX H: Themes related to enabling/coercive features of Global Transparency

GLOBAL TRANSPARENCY		
Enabling features	HOSPITAL L	HOSPITAL S
Better knowledge of operations carried out in other departments	Hospital Deputy Director / Medical Director / Accounting Manager	Nursing Director / Economic & General Services Director / Customer Relations Director / Hospital Director / Human Resources Director
Information sharing with other departments	Medical Director / Nursing Director / Economic Management Manager / Administrative Contracts Manager	Nursing Director / Economic & General Services Director / Customer Relations Director / Technical Services Director / Medical Director / Human Resources Director
Information sharing with other hospitals & institutions	Quality Manager/ Medical Director / Economic Management Manager *Auditing firm surveyor*	Nursing Director / Customer Relations Director
Support from/to Board of Directors	Hospital Deputy Director / Nursing Director / Accounting Manager	Quality Coordinator / Economic & General Services Director / Technical Services Director / Medical Director / Human Resources Director / Hospital Director
Meetings before final audit	Nursing Director	
'From paper to digital'	Nursing Director / Accounting Manager	Customer Relations Director / Hospital Director
Cooperation between auditing firms and Health Department	*Auditing firm surveyor*	
Feedback from auditing firm	Medical Director / Quality Manager	Quality Coordinator / Hospital Director
Suggestions made by employees		Economic & General Services Director / Customer Relations Director
Coercive features	HOSPITAL L	HOSPITAL S
Issues with the Health Department: Limited support and feedback, poor communication channels, etc.	Quality Manager	Medical Director / Human Resources Director
Poor communication and engagement with lower levels	Medical Director / Nursing Director / Economic Management Manager	Technical Services Director / Human Resources
Limited understanding operations carried out in other departments	Billing Manager / Economic Management Manager	Quality Coordinator
Limited assistance to understand hospital strategy		Human Resources Director
Top management tool	Economic Management Manager / Accounting Manager	Quality Coordinator
Restricted access &limited information available to employees	Quality Manager / Hospital Deputy Director / Accounting Manager / Economic Management Manager	Quality Coordinator / Medical Director
Absence of accreditation suggestions & mailbox	Quality Manager	Quality Coordinator

APPENDIX I: NUIG Ethics Committee approval

OÉ Gaillimh
NUI Galway

Leas-Uachtarán um Thaighde
Vice President for Research

15th October 2013

Ref: 13/MAY/10

Mr Perez Miguel
JE Cairns School of Business and Economics
National University of Ireland, Galway

Dear Mr Perez

Re. Ethics Application: Managing performance in difficult times: The challenge of balancing cost control and quality improvement in Spanish public hospitals

I write to you regarding the above proposal which was submitted for Ethical review. Having reviewed your response to my letter, I am pleased to inform you that your proposal has been granted **APPROVAL.**

If you are successful in recruiting another hospital(s) to the study, please advise the REC in writing of this.

All NUI Galway Research Ethic Committee approval is given subject to the Principal Investigator submitting annual and final statements of compliance. The first statement is due on or before May 2014. Please see section 7 of the REC's Standard Operating Procedures for further details which also includes other instances where you are required to report to the REC.

Yours Sincerely

Allyn Fives
Chair, Research Ethics Committee

OÉ Gaillimh,
Bóthar na hOllscoile,
Gaillimh, Éire

NUI Galway,
University Road,
Galway, Ireland

T +353 91 495 312
F +353 91 494 591

www.nuigalway.ie/research/vp_research

APPENDIX J: Essential standards in the second Catalan accreditation process

SECOND ACCREDITATION PROCESS (2013-2014) - Essential Standards (n=696)

1. Leadership (n=71, 10.20%)
a) Leaders develop the mission, vision, values and ethical principles and act as a role model (n=4)
b) Personal involvement of leaders to ensure the development, implementation, continuous improvement and performance management of the organisation's systems (n=50)
c) Organisational leaders know their external stakeholders and create planning tools to understand, anticipate and respond to the diverse needs and expectations of these groups (n=14)
d) Organisational leaders motivate people and give them support and recognition (n=3)

2. Strategy (n=23, 3.30%)
a) The strategy is based on understanding the needs and expectations of stakeholders and the environment (n=8)
b) The strategy is based on understanding the performance of the organisation and its capabilities (n=7)
c) The strategy and its supporting policies are developed, reviewed and updated (included in Criteria 1 and 2a, 2b and 2d)
d) The strategy and supporting policies are communicated, implemented and monitored (n=8)

3. People (n=59, 8.48%)
a) Planning, management and improvement of human resources (n=20)
b) Identification, development and maintenance of knowledge and people's abilities in the organisation (n=16)
c) People involvement and responsibilities in the organisation (n=9)
d) Existence of a dialogue between people and the organisation (n=7)
e) People recognition in the organisation (n=7)

4. Partnerships & Resources (n=106, 15.23%)
a) External partnerships management (n=22)
b) Economic and financial resources management (n=6)
c) Buildings, equipment, materials and natural resources sustainable management (n=49)
d) Technology management (n=13)
e) Information and knowledge management (n=16)

5. Processes (n=295, 42.39%)
a) Design, management and improvement of processes (n=12)
b) Products and services are produced, distributed and managed in the following categories: outpatient; urgent care; care hospitalisation; surgical care; laboratories; blood use and blood components; medication use; radiology, nuclear medicine and radiotherapy; rehabilitation; nutrition; files and clinical documentation; client management; infection prevention and control; clinical research; hospitality; warehouse; social care; client education; and ethics and client rights (n=275)
c) Relations with clients (n=8)

6. Clients Results (n=19, 2.73%)
a) Perception (n=14)
b) Performance indicators (n=5)

7. People Results (n=13, 1.87%)
a) Perception (n=3)
b) Performance indicators (n=10)

8. Society Results (n=17, 2.44%)
a/b) Perception and performance indicators (n=17)

9. Key Results (n=93, 13.36%)
a) Results and key organisational indicators (n=7)
b) Results and key economic indicators (n=5)
c) Results and key operational indicators: key processes and support processes (n=81)

APPENDIX K: Examples of cost/quality indicators included in the accreditation manual [Group 9C 'Operational Results' included in Group 9 'Key Results']

Key processes

(i) Emergency care

- Customers returning to A&E within 72 hours from their discharge. Adjusted by: pathology, technique performed and area/ unit/service (9c-01-02-04-E)
- Number of adverse events in A&E and their reasons (9c-01-02-11-E)

(ii) Hospitalisation care

- Number of discharges, stays and the average stays. Differentiated by: unit, service and diagnosis (9c-01-03-02-E)
- Number of readmissions (new admission within 30 days from discharge for the same process and includes readmissions for further operations or other complications broken down by outpatient, scheduled and emergency surgery) (9c-01-03-06-E)
- Ulcers due to nosocomial pressure related to the admission of customers. It is differentiated by functional unit and previous pathology (i.e., diabetes, obesity) (9c-01-03-11-E)
- Number of adverse events in the hospitalisation area and their reasons (9c-01-03-13-E)

(iii) Surgical care

- Occupation time of theatres based on performance by service and theatre (9c-01-04-02-E)
- Post-anaesthetic and post-surgical/obstetric complications (9c-01-04-09-E)
- Repeated operations (new operation within 48 hours and before the discharge, not scheduled) (9c-01-04-11-E)

Support processes

(i) Laboratories

- Incidents classified by reasons (i.e., procedural faults resulting in tests repetition, lost reports, delay due to equipment shutdown) (9c-02-01-03-E)

(ii) Use of blood & blood components

- Errors made by the transfusion services (9c-02-02-07-E)
- Bedside blood component administration errors (9c-02-02-08-E)
- Incidents and their reasons (i.e., order delivery delays, contagious diseases) (9c-02-02-10-E)

(iii) Use of medication

- Error rates in drugs prescription: evaluated by unit, service and diagnosis (9c-02-03-04-E)
- Error rates in drugs dispensation: evaluated by unit, service and diagnosis (9c-02-03-05-E)
- Error rates in drugs administration: evaluated by unit, service and diagnosis (9c-02-03-06-E)
- Adverse reactions, toxicities and incompatibilities detected in customer services (9c-02-03-07-E)

(iv) Radiodiagnosis, nuclear medicine and radiotherapy

- Incidents and their reasons (9c-02-04-06-E)
- Complications and their reasons (9c-02-04-07-E)

(v) Archive, documentation, customer management and information systems

- Number of duplicated clinical histories (on paper and electronically) (9c-02-07-03-E)
- Number of lost histories detected (9c-02-07-04-E)

(vi) Infection control and prevention

- Incidence and prevalence of nosocomial infection in relation to activity (9c-02-08-01-E)
- Incidents registered and reasons (i.e., autoinoculation accidents) (9c-02-08-01-E)
- Number of nonconformities in sterile material delivered by functional units (9c-02-08-03-E)

(vii) Waste management

- Number of incidents detected in waste management processes (9c-02-13-02-E)