The impact of accreditation on healthcare quality improvement: a qualitative case study

Document Version:
Peer reviewed version

Queen's University Belfast - Research Portal:
[Link to publication record in Queen's University Belfast Research Portal](#)

Journal of Health Organization and Management

The impact of accreditation on healthcare quality improvement: a qualitative case study

SCHOLARONE™
Manuscripts

The impact of accreditation on healthcare quality improvement: a qualitative case study

Abstract

Purpose

Research on accreditation has mostly focused on assessing its impact using large scale quantitative studies, yet little is known on how quality is improved in practice through an accreditation process. Using a case study of an acute teaching hospital in Portugal, the article aims at exploring the dynamics through which accreditation can lead to an improvement in the quality of healthcare services provided.

Design/methodology/approach

Data for the case study was collected through 46 in-depth semi-structured interviews with 49 clinical and non-clinical members of staff. Data were analysed using a framework thematic analysis.

Findings

Interviewees felt that hospital accreditation contributed to the improvement of healthcare quality in general, and more specifically to patient safety, as it fostered staff reflection, a higher standardization of practices, and a greater focus on quality improvement. However, findings also suggest that the positive impact of accreditation resulted from the approach the hospital adopted in its implementation as well as the fact that several of the procedures and practices required by accreditation were already in place at the hospital, albeit often in an informal way.

Research limitations/implications

The study was conducted in only one hospital. The design of an accreditation implementation plan tailored to the hospital's context can significantly contribute to positive outcomes in terms of quality and patient safety improvements.

Originality/value

This study provides a better understanding of how accreditation can contribute to healthcare quality improvement. It offers important lessons on the factors and processes that potentiate quality improvements through accreditation.

Introduction

Healthcare quality improvement is one of the key priorities of health systems worldwide (Chassin, 2013). Influenced by the developments on quality management in the manufacturing industry, continuous quality improvement also became a major area of concern in the healthcare sector, particularly since the 1980s (Boaden, 2005; Graham, 1995; Kilo, 1998). In the late 1990s, this focus on quality management, and more specifically on patient safety, gained a new impetus with the publication of reports such as *To Err is Human* (Kohn *et al.*, 2000) which alongside highlighting the magnitude of adverse events, argued about the possibility of preventing a significant number of them (Vincent, 2011). As a result, several initiatives have been adopted in order to improve the quality of care provided, including total quality management (McLaughlin and Kaluzny, 2004), plan-do-study-act (Taylor *et al.*, 2014), collaboratives (Schouten *et al.*, 2008), statistical process control (Thor *et al.*, 2007), and six sigma (DelliFraine *et al.*, 2010).

Amongst the quality initiatives adopted in healthcare, accreditation has increasingly been considered as the preferred method to promote healthcare quality at organisational and service levels (Shaw *et al.*, 2010), given its wide reputation as a key driver for healthcare quality and patient safety improvement (Braithwaite *et al.*, 2010; Rooney and Van Ostenberg, 1999). Despite the significant expenses associated with accreditation, hospitals consider it as a worthy investment (Saleh *et al.*, 2013). Accreditation's perceived value in improving healthcare quality has led to the establishment of mandatory accreditation programmes in countries such as Iran (Jaafaripooyan, 2011), Italy, Scotland and France (World Health Organisation, 2003).

On the whole, evidence suggests that hospitals which have embarked on accreditation programmes have higher performance in comparison with those which have not (Shaw *et al.*, 2010). In a random sample of 23 hospitals in Australia, it was found that the hospitals that had applied for accreditation performed better in terms of administration and management, medical staff organisation, organisation of nursing services, review systems, physical facilities and safety, and hospital role definition and planning (Duckett, 1983). In a systematic review involving 66 studies, Greenfield and Braithwaite (2008) found consistent findings that accreditation contributed to promote change and professional development.

However, notwithstanding the commonly accepted perceptions by governments (El-Jardali *et al.*, 2008) and healthcare professionals (Diab, 2011; El-Jardali *et al.*, 2008) on the benefits of accreditation; existing evidence is either modest (Hinchcliff *et al.*, 2012; Lutfiyya *et al.*,

2

2009) or inconclusive (Bogh *et al.*, 2015; Braithwaite *et al.*, 2010; Dean Beaulieu and Epstein, 2002; Greenfield and Braithwaite, 2008; Miller *et al.*, 2005; Shaw *et al.*, 2010; Thornlow and Merwin, 2009), particularly regarding its impact on the quality of care. For example, findings from a study of 216 state psychiatric hospitals in the U.S. revealed a weak association between accreditation and the seven indicators of quality of care selected (average cost per patient, per diem bed cost, total staff hours per patient, clinical staff hours per patient, percent of staff hours provided by medical staff bed turnover, and percent of beds occupied) (Hadley and McGurrin, 1988). Data from a randomised control trial involving 20 South African hospitals (Salmon *et al.*, 2003) showed that although accreditation had a positive effect on nurses' perception of clinical quality, it had little or no effect in the remaining seven quality indicators selected (client satisfaction, client medication education, accessibility and completeness of medical records, quality of perioperative notes, hospital sanitation, and labelling of ward stocks).

As a result of this lack of robust empirical evidence on the impact of implementing accreditation standards (Greenfield *et al.*, 2012) as well as little knowledge on accreditation's implementation process (Hinchcliff *et al.*, 2013), several calls for further research how accreditation programmes affect the structure, process and outcomes of hospital care have been made (e.g. Greenfield and Braithwaite, 2008; Hinchcliff *et al.*, 2012; Pomey *et al.*, 2004; Shaw *et al.*, 2010). Specifically, the link between accreditation and hospital healthcare quality has remained under-studied (Schmaltz *et al.*, 2011) as well as the processes through which accreditation "might lead to improved quality of care, strengthen leadership culture and climate, and how these factors in turn might mediate accreditation performance" (Braithwaite *et al.*, 2010:19).

This article presents an in-depth qualitative study of an acute hospital which embarked on an accreditation programme. The central aim of the research was to explore the mechanisms through which the accreditation process resulted in quality improvement. By exploring the factors that facilitated or hindered the impact of accreditation's implementation process on quality and patient safety improvements, this study contributes to the understanding of the reasons behind accreditation's mixed results, often found in systematic synthesis of accreditation literature (e.g. Greenfield *et al.*, 2012). In doing so, it also adds to the theoretical development of the accreditation literature (Hinchcliff *et al.*, 2012). From a practitioner's point of view, the results of the article will help healthcare managers to attain higher quality improvements from the implementation of hospital accreditation.

Research Methodology

This study adopts a qualitative case study of an acute teaching hospital in Portugal. The case study research method was chosen given its advantages for the analysis of qualitative complex events (George and Bennett, 2005), its capacity to obtain detailed information about the case in analysis (Hammersley, 2001) and the ability to deal with a wide range of sources of evidence, such as documents and interviews (Yin, 2013).

The case study hospital was purposively selected (Maxwell, 2012) given that it is recognised as one of the pioneer hospitals in Portugal adopting quality and patient safety improvement initiatives. Data were mainly collected using semi-structured interviews. Interviews are considered as one of the key sources of evidence within qualitative case studies (Yin, 2013). The first round of eight interviews took place in June 2009 and involved nine interviewees. It provided information on the historical context of the hospital's increased emphasis on quality and patient safety improvement. Interview questions focused on exploring the key drivers for the establishment of quality and patient safety improvement as a hospital priority; the main quality and patient safety initiatives adopted and the role of the different departments and hospital staff in their design and implementation; as well as the impact that the organisational structure, internal processes and organisational culture had on the entire process.

The second stage of 38 interviews involving 41 interviewees was conducted between December 2009 and January 2010 and focused on the details of specific patient safety projects such as falls prevention and the improvement of the hospital's accessibility. The selection of these projects was decided by the researcher and was motivated by several factors. Above all, data gathered during the first stage of interviews suggested that falls prevention initiatives were one of the biggest patient safety projects adopted by the hospital in terms of the timeframe, range of activities, and number of departments and staff involved. Although the accessibility project was considered by interviewees a much smaller scale project in terms of staff directly involved, interviewees recognized its significant impact on the quality of care provided and overall patient experience. Second, given the non-clinical background of the interviewer, both projects seemed to be appropriate subjects of study as they would not require the researcher to obtain clinical knowledge in order to be able to collect and analyze data. Finally, both projects were relatively recent initiatives. This increased the possibility of interviewing staff that had been involved at the beginning of the projects and facilitated interviewees' recalling of past events associated with the projects;

which were considered as important contributors towards ensuring an appropriate level of trustworthiness of the interview data collected.

Themes covered in the second stage of interviews included the reasons for the adoption of the specific projects studied and the factors that influenced both their design and implementation across the hospital's departments. In both stages, the impact of accreditation in quality improvement was an important issue.

Given the outsider nature of the interviewer and the resultant unfamiliarity with the hospital setting, adopting a staged-research was considered to be the best strategy to achieve an in-depth understanding of the case study. The initial collection of contextual information on the hospital's quality and patient safety initiatives was subsequently used to frame the research in terms of the choice of projects to focus on. Pragmatically, conducting research in a staged way also facilitated the hospital's ethics approval process.

In total, 46 interviews, involving 49 interviewees (30 women and 19 men) were conducted. One of the interviewees was interviewed twice, given their membership in the quality management department and knowledge on specific patient safety projects researched. The first interview took place during the first stage of data collection and focused on the hospital's quality and patient safety initiatives and the role played by the quality management department in such activities. The second interview was conducted during the second stage of data collection and explored specific patient safety projects.

Overall, interviews lasted from 12 to 120 minutes and the average duration was 43 minutes. In order to gain as broad a picture as possible of the quality improvement projects, respondents were selected from an array of departments and professional roles. Interviews were conducted with 25 nurses, eight doctors, four nurse aides, three engineers, two administrative staff, two health and safety technicians, two managers, two social workers and a laboratory technician. These professionals worked in several clinical and non-clinical departments, including cardiology, accidents and emergency, general surgery, sterilization, premises and equipment, quality management department, catering services, human resource department, social services, and customer care department. The vast majority of interviewees were directly involved in quality and patient safety initiatives in their day to day job. In order to better understand hospital staff's involvement in quality and patient safety initiatives, the interviewer also conducted some interviews with staff whose activity is not directly related with quality and patient safety issues (e.g. administrative staff). These interviews aimed at

checking the extent which quality and patient safety initiatives were known across the hospital. As a result, some of the interviews conducted were of shorter duration.

Interviews took place at the department were interviewees work and were conducted in Portuguese. In each of the stages, all interviews followed the same interview schedule; however not all interviews covered all the questions. The exact questions asked to each interviewee depended on their involvement with and knowledge of quality and patient safety projects, as demonstrated by their responses to previous questions. All interviews but four (one in the first stage and three in the second stage) were individual interviews. Interviews with two professionals took place due to pragmatic reasons such as office sharing. Whereas joint interviews have the advantage of interviewees jointly contributing to the story and thus filling in the gaps in the narrative (Morris, 2001), the interaction during the interview may be influenced by the preexisting relationship between interviewees (Morris, 2001), which can result in one interviewee dominating the interview or silencing the other's account (Polak and Green, 2016). Notwithstanding the limitations of joint interviewing, the interviewer felt that conducting joint interviews did not impact interviewees' responses. Interviewees were approached using a snowball approach, whereby interviewees suggested other hospital staff considered relevant for the case study (Black, 2002).

All interviews but two were audio-recorded and verbatim transcribed by the researcher. In the remaining two interviews interviewees asked to not be recorded and thus detailed notes were taken. Data from interviews was supplemented by data from statistics, annual reports, presentations provided by the hospital as well as information on the hospital published in magazines, the hospital's website and documents from the Portuguese Ministry of Health.

The ways additional information was analyzed and used to inform the research varied according to the source. At the beginning of the research, the hospital's website was browsed in order for the researcher to become acquainted with the hospital's context in terms of its organizational structure, healthcare provision, quality and patient safety initiatives adopted, etc. Documents from the Ministry of Health, articles published in magazines, and hospital's annual reports helped to understand the Portuguese National Health Service as well as how the hospital compared with other public hospitals regarding quality and patient safety projects. Given that the objective of using these sources was to obtain a general overview of the case study's context, their analysis followed an unstructured approach in which the author read the sources and took notes of the information considered relevant for the study.

By contrast, statistics and presentations provided by the hospital during the first stage of interviews were used by the author to obtain further details on aspects discussed during the interviews. For example, photographs included in the presentations helped the interviewer to visualize changes made to the built environment as part of quality and patient safety projects.

Interview data were open-coded and analysed using a framework thematic analysis (Spencer *et al.*, 2014). As Spencer *et al.* (2014) describe, the framework thematic analysis, commonly known as the 'Framework' is an analytic tool which in addition to the key steps of the data management process included in thematic analysis, has the extra phase of 'data summary and display'. In this way, data analysis involved:

i)   familiarization with the data;

ii) identification of a set of preliminary themes and sub-themes (i.e. the initial thematic framework). The devised thematic framework included themes such as "advantages of accreditation" and sub-themes such as "higher formalization", "accreditation process as trigger for change", "bigger role of statistics" and "more formalised communication";

iii) indexing and sorting of the data using the devised thematic framework. Indexing and sorting was made by reading all interview transcripts and writing the themes on the margins of the transcripts;

iv) review of the themes and sub-themes; and

v)   data summary and display. For each theme a table linking the sub-themes with the data excerpts was created.

All the analysis was conducted by the author. Interview excerpts were translated by the author and an attempt was made to preserve the original meaning. Computer Assisted Qualitative Data Analysis Software was not used to manage and organise the data given the familiarity of the author with the data and to avoid over-extracting the data out of its context (Agius *et al.*, 2015; Spencer *et al.*, 2014).

Ethics approval to conduct the study was obtained from the hospital and from The University of York. All participants received an information sheet with details about the study and signed a consent form before the start of the interview.

Findings

The results first describe the rationale for the hospital to have embarked on the accreditation process and then discuss how this process led to quality and patient safety improvements. This analysis takes into account the intrinsic features of accreditation and the specific characteristics of the accreditation's implementation process inside the case study hospital.

Rationale for the accreditation process

Interviews suggest that two main inter-related factors motivated the case study hospital to embark on the accreditation process. Internally, the change of board members in 2000 led to a more formalised focus on quality improvement. In the words of a non-clinical staff member, the hospital started to adopt "*a philosophy of continuous quality improvement.*" As part of this greater focus on quality improvement, several initiatives aimed at improving the quality of care were adopted, including the start of the accreditation process in 2000. In the words of a member of the quality management department, accreditation was perceived as "*a code of good practices*" and as "*a methodology that somehow could make some transformations in terms of the quality culture*".

Externally, the hospital's strategic approach to quality improvement was aided by the Portuguese Ministry of Health's own strategy to improve the quality of care provided. In the late 1990s and early 2000s the Portuguese Ministry of Health established formal agreements with international bodies to facilitate the quality improvement of the healthcare providers of the Portuguese National Health Service. Among these was the agreement made with the UK King's Fund Health Quality Service (KFHQS) on the 17th March 1999 (Ribeiro, 2004), which gave rise to what in Portugal is known as the *Programa Nacional de Acreditação dos Hospitais* (National Programme of Hospitals' Accreditation). Participation in this accreditation programme was optional and the role of the Ministry of Health was to facilitate the contact between the KFHQS and Portuguese hospitals.

Impact of the accreditation process

In terms of outcomes, the accreditation process was perceived by interviewees as having contributed to significant quality and patient safety improvements in the case study hospital. Several respondents pointed out that accreditation played a key role in the establishment of a patient safety culture within the hospital. Respondents also felt that accreditation led to a shared feeling that everyone inside the hospital could play an active role in improving the quality of care across the hospital:

> We have noted a generalisation of this patient safety culture. Staff feel that it is important, that everyone is involved in patient safety (Member of the quality management department).

> The funny thing is that professionals are very involved in reporting and improving the quality of their services, i.e., if I am in my clinical unit and I see a less good thing for patients or for staff, I will communicate that and give a suggestion for improvement. [This culture] has a positive impact. I think people are more conscious that they can have an active role and that we can all contribute (Nurse).

One visible result of this strengthening of patient safety culture was the rise in the number of notifications of patient safety incidents from 254 notifications (in the year 2004) to 846 (in 2006) and 2015 (in 2008). Several interviewees mentioned that staff became more aware of the importance of reporting incidents even if they were minor incidents.

Evidence from the interviews indicates that several factors contributed to the quality and patient safety improvements resultant from the accreditation process. Whereas some of these were intrinsic to the accreditation process itself, others were related to way the hospital implemented accreditation and/or to the specific characteristics of the hospital.

Factors intrinsic to the accreditation process

Evidence from the interviews suggests that, overall, the accreditation process acted as a trigger and drive for change towards quality and patient safety improvements and therefore shaped the hospital functioning in several ways. From the outset, accreditation expedited change, as obtaining accreditation requires the compliance with a series of requirements:

> We implemented some things because we were concerned about the accreditation. When accreditation [assessment] is approaching, we know we have certain parameters to meet and so we rush to implement them. This is the reality of our institutions […] we rush to get everything implemented in order to get the certificate (Nurse).

> There are things that are defined in the accreditation [manual] which are mandatory and we had to create mechanisms to fulfil those requirements (Non-clinical staff member).

This idea of urgency and speediness associated with the accreditation process was mentioned by several interviewees and contrasted with their views of slowness and difficulty for change which were perceived as intrinsic characteristics of hospitals:

[Talking about barriers for the implementation of quality improvement projects] Inside hospitals, everything is too slow. People are not very receptive to [new] ideas, people are always busy, people allege lack of time. I think above all is lack of resources. This is the biggest barrier (Doctor).

A second key characteristic of the accreditation process as a trigger for change was its ability to draw attention to important areas of healthcare quality that in the early 2000s were not so popular. An example of this was patient safety which at that time was a topic still in its infancy both in terms of research and practice. Embarking on the accreditation process was considered by several interviewees as a key factor for the establishment of a higher patient safety culture inside the hospital given the emphasis placed on patient safety by the accreditation manual:

Two thirds of the accreditation manual are related with patient safety (Member of the quality management department).

Two other examples mentioned by interviewees of quality issues that gained further attention as a result of the accreditation process were i) a higher focus on developing cross-departmental strategies to prevent patient falls and ii) changes in the hospital's physical infrastructure in order to improve its accessibility for patients (e.g. through the creation of ramps for wheelchair access, and changes in the decoration and layout of hallways in the new building in order to facilitate patients to recognise the floor where they are at).

Finally, the accreditation process was also frequently mentioned by interviewees as a force towards greater formalisation within the hospital. As discussed next, this formalisation – mainly observed through the increase of written procedures and the development of formal performance management systems – was considered to have affected the day-to-day clinical practice in several ways.

The fact that the accreditation required shared written procedures across the hospital in accordance with accreditation standards was perceived by interviewees as an opportunity for the improvement of existing procedures, as well as the creation of new ones:

I think that the fact that accreditation requires certain things was advantageous for all institutions because it meant that if we already have them, great; if we didn't have or didn't have so well, we had to improve (Nurse).

Additionally, the existence of shared written procedures was seen as a catalyst of higher standardization of routines as well as a driving force towards staff learning and cross-departmental communication:

> The accreditation [process] systematizes the communication and document workflows a lot. [It] led to the organisation and systematization of procedures. Accreditation has that huge added value of forcing the existence of routines and documents so that everyone acts in the same way (Engineer).

> It is good for staff to know that procedures are written and available for consultation in the clinical unit where they work (Non-clinical staff member).

> When it is not on paper, we need to be repeating the same thing every day, needn't we?! (Non-clinical staff member).

Finally, the higher formalization of procedures was seen as resulting in a better patient experience:

> [Accreditation] led clinical units to have written procedures that are disclosed to all professionals and made available in folders for everyone to consult. For example, when an immigrant doesn't speak Portuguese, we have written information indicating who can help. A few years ago it was through informal contacts. […] Some written procedures help us to get closer to patients. This is an example of one (Non-clinical staff member).

Another aspect associated with the higher formalisation fostered by the accreditation process was the development of performance management systems including the formal definition and monitoring of performance targets:

> In the [accreditation] there are demands in terms of the monitoring of a series of items (Non-clinical staff member).

> [Before accreditation] staff tried to improve what was possible. [Performance improvement] was not an institutional policy, let's say. […] Now it is written, it is an aim of the [clinical] service. […] It is not only the concern of doing things right, there are in fact objectives to be taken into account and hence I think that is useful (Non-clinical staff member).

> This department has to meet the objectives set by the board through cascading […] Since [the hospital] started to participate in the accreditation, we started having auditing, things started to be streamlined. Although [in the past] staff were concerned

> about the quality of care they delivered, for example in terms of falls and risks that patients incurred in the hospital, I think that the concerns [regarding quality], in such an organised way, have been stronger since the accreditation started (Nurse).

These responses show a clear move from an informal culture where staff guided their practice by what they considered to be the right thing to do, into a more formalised environment where performance objectives are defined at institutional level and then cascaded to departmental and clinical unit levels. Additionally, the formal monitoring and communication to clinical units of their performance allowed each clinical unit to know their contribution to the hospital's overall objectives. Besides contributing to a reduction of the silo mentality, the new performance management systems also improved staff's motivation to contribute to quality and patient safety improvements, including the notification of patient safety incidents:

> With the [formalisation] of the clinical auditing process, clinical auditing started to be systematised, data started to be treated and [for each clinical unit] a report and an improvement plan were introduced. Somehow that has improved [the performance of] clinical units and also motivated professionals to improve what is less good (Member of the quality management department).

Taken together, the existence of written procedures formally communicated to staff and the formal monitoring of performance increased staff's commitment in following the procedures:

> In the case of a new procedure being informally implemented staff could say "I am not going to follow it because nobody told me anything about it". With formal communication no one has that kind of justification. They can justify by saying "I am not following the procedure because I don't feel like it", which is different, you see?! (Nurse).

> People have that sense of responsibility of not letting things to be done, because then we conduct internal audits (Nurse).

Although the features of the accreditation process played a significant role in fostering quality and patient safety improvements, both the hospital characteristics and the approach followed in the implementation of the accreditation process were vital for the achievement of such improvements.

Factors intrinsic to the case study hospital

During the interviews, respondents mentioned a series of specific features of the case study hospital that contributed to the quality and patient safety improvements achieved through the

accreditation process. One of these facilitators was the autonomy the Portuguese Ministry of Health gave to the hospital to decide to either embark or not on the accreditation process and to independently manage the entire accreditation process.

Interviewees felt that this autonomy with which the hospital managed the accreditation process allowed the hospital to adapt the requirements of the accreditation to its context. One example of this was the change in the organisational structure. Around the year 2004/2005, the hospital centralised the existing four services related to quality improvement (quality, clinical governance, hygiene and safety, and occupational health) under one single department, the quality management department with a staff of sixteen part-time and full-time members. Similarly to the other departments inside the hospital, the quality management department directly reports to the hospital board. In addition of fostering coordination, the centralisation of all quality activities also helped to give visibility to quality management inside the hospital:

> The creation of the [quality management] department, which in many other hospitals doesn't exist with this name and with this structure, also gave more emphasis and increased [quality] concerns (Nurse).

Another example of the contextualisation was the way the hospital designed the accreditation procedures. Within the hospital, although the accreditation process was managed by a team of staff of the quality management department, several thematic working groups were created in order to develop specific procedures. Each working group was formed by staff from several departments across the hospital who were actively involved with the topic in question in their day-to-day activity. This knowledge and experience of the reality on the ground ensured that procedures were tailored to the hospital's context:

> The standards of the international accreditation manual are then adapted and implemented with the peculiarities of the hospital. […] The working groups try to materialize the standards in accordance with the particularities of this hospital (Non-clinical member of staff).

> It is easy to develop work instructions. Without clinicians that is impossible because we are in a hospital (Doctor).

In addition of adapting the accreditation standards to the overall hospital context, during the interviews it was clear that the entire accreditation process took into account not only the particularities of the hospital but also the peculiarities of individual departments. For example, whereas formalisation of procedures was seen by interviewees as a feature of

accreditation which acted as a facilitating factor to quality and patient safety improvement, some interviewees noted the potential for adverse effects that could arise from formalisation:

We live overwhelmed with work and form filling (Nurse).

In order to avoid an over formalisation, the team responsible for the accreditation process closely interacted with the clinical units to seek their views on the procedures before they were implemented. As a result of this collaborative approach, some procedures were tailored in order to fit with specific departments. For example, the clinical condition of the maternity unit patients led to the re-design of the form used to report patient's falls in order to allow a more detailed reporting of less severe falls. Similarly, it was decided to assess the accidents and emergency (A&E) patients' risk of falling by observing the patient or by filling in a paper based form rather than by filling in a computer-based version of the Morse fall scale (Morse, 1997) as used in the other departments of the hospital, given the unpredictability and urgent character of the activities of the A&E unit and its IT systems.

The adoption of a collaborative approach not only resulted in the design of contextualised procedures and the consequent buy-in from staff, but also led to a shared quality improvement culture where all staff felt welcomed to contribute to. This impact on culture is particularly significant given its perceived importance on quality and patient safety improvements. During interviews, culture was frequently mentioned as one of the factors that contribute the most for differences in quality and patient safety across departments and hospitals:

I think that what leads to differences [in quality] between hospitals and between [hospital] departments is people's sensibility [to quality issues] or realizing that [some actions] can make a difference (Nurse).

A final example of contextualisation was the developmental way in which the hospital used performance management systems. Although as part of the accreditation process the hospital started to give a greater emphasis on statistics and performance monitoring, these were used as information and learning tools rather than a means towards formal accountability and/or in a punitive way. This constructive approach led to a high staff motivation to contribute to quality improvement. An example of this culture was portrayed in how staff approached incidents notification:

Reporting incidents can be done in an anonymous way. Curiously, in more than 2000 incident reports only 40 are anonymous. Thus there is no fear of reporting (Member of the quality management department).

14

Alongside the autonomy to manage the accreditation process, which facilitated a high degree of contextualisation with the advantages discussed above, another critical factor for the positive results of the accreditation was the commitment of the hospital board. As described in the following quotes, this commitment ensured the allocation of appropriate resources and facilitated organisational change:

> The involvement of top management was fantastic because there are cross-departmental changes that couldn't have been accomplished without the involvement of top management because it involves costs, involves time, involves human resources and all of this needs to be paid (Nurse).

> Patient safety and clinical risk need to be a strategic priority of the organisation […] otherwise there is no chance to work on the ground, as we did […] we improved clinical auditing and we trained staff and it was expensive because it is a very high financial investment. I think we were lucky in having a president of the board that was a clinician and realised that the price of bad quality was very high and thus invested in training and clinical auditing (Member of the quality management department).

Finally, another hospital feature that facilitated quality improvement through the accreditation process was the baseline level of quality development in the hospital. At the time the hospital embarked on the accreditation process many of the required procedures were already in place, albeit in some cases informally. This facilitated the achievement of the accreditation requirements:

> Many clinical units already had written procedures for a long time (Member of the quality management department).

> [With the accreditation] we created clinical auditing. In some cases it was a matter of formalising what already existed […] a lot of work was already done but it wasn't written down and wasn't systematised. [For example], the result [of the audit] would stay there without the follow-up [we now have] (Member of the quality management department).

Discussion

A central finding from this study is hospital's staff perception that accreditation can contribute to significant improvements in quality and patient safety but that attaining these is strongly dependent on how accreditation is implemented in practice and the characteristics of

the hospital setting. Interviewees reported that accreditation led to a higher concern with patient safety as an aspect of healthcare quality which resulted in significant quality and patient safety improvements, including the establishment of a generalized patient safety culture. These observations are in line with studies conducted by Hosford (2008) who recognised accreditation as an effective intervention to drive patient safety improvements and by Longo *et al.* (2007) who identified accreditation as the key predictor of the implementation of patient safety systems. The findings are also consistent with previous studies that reported that over time accredited hospitals significantly saw greater progress on quality (Schmaltz *et al.*, 2011) and patient safety systems (Longo *et al.*, 2007) than non-accredited hospitals.

During interviews, respondents identified a series of other intrinsic characteristics of the accreditation which fostered quality improvements. First and foremost, the fact that accreditation requires meeting a set of norms by a specific date provided a powerful tool to finally introduce long-awaited changes as it overcame the resistance to introduce them. This feature of accreditation has been pointed out by previous research that has acknowledged accreditation as an "effective leitmotiv for the introduction of change" (Pomey *et al.*, 2010:1). As Duckett (1983:1574) identified, one of the most striking features of accreditation is its usefulness as a weapon to "be used for the completion of various tasks which are overlooked in the 'routine burly-burly of shifting paper'". Furthermore, in the case study hospital, accreditation provided an opportunity for reflection on the existing practices and fostered the formalisation of procedures, which confirms the findings of other studies (Pomey *et al.*, 2004; Pomey *et al.*, 2010). As Pomey *et al.* (2004) found in their study of a university hospital, the formalisation of practices also led to a change from a hospital where organisational learning was mostly transmitted by word of mouth to a hospital where learning is significantly supported by a writing culture.

In the interviewees' views, alongside the characteristics of the accreditation process, several factors associated with the hospital and how the accreditation was implemented significantly impacted on the quality and patient safety improvements attained through accreditation. From the outset, the hospital board's commitment to the accreditation process, including the facilitation of appropriate financial and personnel resources were frequently mentioned during interviews as an important facilitator of quality and patient safety improvements. The institutional commitment to improve quality and patient safety and the availability of resources have been identified by patient safety studies as key facilitators of patient safety improvements (Devers *et al.,* 2004; Fukuda *et al.*, 2009). Findings from the case study also

reinforce the importance of a strong leadership in achieving better outcomes from accreditation which has been pointed out by authors such as Braithwaite *et al.* (2010).

Another key reason of the hospital's accreditation outcomes relates with how the accreditation was implemented. The case study hospital was given the autonomy to choose to embark or not on the accreditation process and was allowed to manage its accreditation process with independence. For the case study hospital, this high autonomy led to the possibility of adjusting the accreditation standards to the hospital's context, which resulted in a high acceptance of the accreditation procedures and positive outcomes in terms of quality and patient safety improvements. During interviews it was clear that implementing the accreditation following a collaborative approach which welcomed staff's participation and sharing of their views was a key success factor of the positive outcomes of the accreditation process. Adopting an accreditation program following a collaborative ethos has been identified by Hinchcliff *et al.* (2013) as a critical enabler in the effective implementation of an accreditation program.

Furthermore, in the case study hospital, the knowledge of the activities of clinical departments and of the specificities of its patients, alongside the ability of the case study hospital to tailor patient safety initiatives to each clinical unit's context were pointed out by interviewees as fundamental aspects in the design and implementation of effective patient safety initiatives. In Devers's *et al.* (2004) study of US hospitals, the existence of managers and clinicians with knowledge about suitable patient safety solutions and ways to implement them according to the hospital's context was also perceived as a valuable institutional nonfinancial resource.

Albeit patient safety literature recognises the knowledge of and capacity to adapt to the context as two important factors towards the successful implementation of patient safety initiatives, it often considers the importance of contextualisation at an organisational level rather than contextualisation according to the specificities of individual departments or clinical units. In the case study hospital, concerns with the contextualisation at a micro level assumed high significance. As seen above, in the case study, the peculiarities of the clinical departments were taken into account during the design of patient safety initiatives (e.g. re-design of the falls reporting form to fit the clinical condition of the maternity unit patients) and at the implementation stage (e.g. use of observation or a paper-based version of the Morse fall scale in the A&E, instead of the computer-based version used in the other hospital departments). This capacity to adapt procedures at departmental level to fit with the IT

systems of the A&E also allowed overcoming the limitations of the IT infrastructure which are recognised as a common hospital structural barrier in the implementation of IT- intensive patient safety initiatives (Devers *et al.*, 2004).

The importance of autonomy and contextualisation is in line with Touati and Pomey's (2009) study on French hospitals where the authors concluded that the fact that the accreditation process was compulsory and hospitals were required to fulfill certain standards by law resulted in the accreditation process being perceived as an inspection. Additionally, the impossibility of adapting the accreditation standards to the context of specific clinical departments led to criticisms regarding the legitimacy of such standards (Touati and Pomey, 2009).

Two other internal hospital features mentioned by interviewees as very important for the maximisation of the impact of accreditation on quality and patient safety improvements were the quality management department and the hospital's previous experience with quality improvement initiatives. The concentration of all quality management activities, including the accreditation process, in a single department dedicated to quality management and which hierarchically is comparable to the other hospital departments was perceived by interviewees as a facilitator of the accreditation positive outcomes on quality and patient safety. The quality management department was seen as a mechanism to enhance the coordination of hospital's quality activities, including knowledge sharing across the hospital departments. Additionally, the concentration of all quality projects in a relatively small department also fosters the possibility of attaining greater economies of scale in the use of resources. This finding is in consonance with Fukuda *et al.*'s (2009) study of Japanese hospitals, where the authors found that from an economic perspective, it is easier for bigger hospitals to implement patient safety initiatives, given that the economic burden is significantly larger for smaller hospitals.

Given that the accreditation process requires demonstrating that the institution meets the accreditation norms, a greater experience on quality initiatives fosters an institution's potential of learning with the accreditation process, therefore maximising the propensity to achieve even greater quality improvement outcomes. The years involved in quality improvement initiatives have been pointed out in the literature as an important factor for the success of such projects (Kaplan *et al.*, 2010). Similarly, the readiness for change and easiness in adopting the required procedures contribute to the achievement of greater impacts through accreditation (Duckett, 1983). The fact that in the case study hospital many of the

procedures required by the accreditation already existed in practice, albeit informally, was perceived by interviewees as facilitating the hospital in meeting the accreditation norms. In several cases meeting these standards essentially required writing the existing procedures. Additionally, given that the hospital was already significantly advanced in terms of quality improvement practices, the accreditation process fostered the hospital to use it to improve even further its existing procedures. Finally, the large number of staff in the case study hospital and the fact that the hospital is a teaching hospital facilitated the quality management department's access to a larger body of knowledge when compared with that generally available to a smaller hospital.

Conclusion

One of the key conclusions of this study is that although the accreditation process itself has features that can foster quality improvement, the achievement of such improvements is strongly conditioned by the hospital's baseline level of quality as well as the quality management and patient safety activities that exist at the time the hospital embarks on accreditation. Given the significant impact that hospital's characteristics have on the outcomes of accreditation, findings from the case study seem to point out that differences among the hospitals that have embarked on accreditation processes are one of the main reasons why accreditation processes have resulted in disparate outcomes.

Whereas this study provides important findings, it also has limitations because of the characteristics of qualitative research in general, and of the research methods employed. Given the single case study method adopted, the generalizability of the findings to other settings has limitations (Yin, 2013). Also, the very fact that the study depended on interviewees to gather most of the data conditioned the researcher's knowledge of the case study. As Rossman and Rallis (2003:124) note, "[i]nterviewing takes you into participants' worlds, at least as far as they can (or choose to) verbally relate what is in their minds." Additionally, the present study drew significantly on the opinion of hospital staff directly involved in the design and implementation of quality and patient safety initiatives, with the majority of interviewees being nurses. This fact could have resulted in a bias from clinicians in general, and from the nursing profession in particular. Finally, interviews were conducted and analyzed by the author. As a feature of qualitative research, the key role of the researcher in the whole research process could have influenced the quality of the evidence gathered and the interpretation of the data.

Research on hospital accreditation would benefit from additional research on the implementation process in order to identify other factors that potentially impact on the outcomes of accreditation in terms of quality and patient safety improvements. A suggestion for further research would be to conduct other in-depth case studies in different hospital settings. For example, non-teaching hospitals, hospitals of smaller size, for-profit hospitals, and hospitals belonging to health systems with mandatory accreditation programs. Additionally, further research could investigate the impact of accreditation on hospital performance using quantitative methods alongside qualitative methods. Comparing the findings of this study with those of future studies would allow assessing the extent to which the findings were influenced by methodological limitations.

References

Agius, S. J., Brockbank, A., Baron, R., Farook, S., and Hayden, J. (2015), "The impact of an integrated medical leadership programme", *Journal of Health Organization and Management*, Vol. 29 No. 1, pp. 39-54.

Black, T. R. (2002), *Understanding social science research,* Sage Publications, London.

Boaden, R. (2005), "The contribution of quality management to patient safety", Walshe, K. and Boaden, R., *Patient safety: research into practice,* Open University Press, Maidenhead, pp. 41-65.

Bogh, S. B., Falstie-Jensen, A. M., Bartels, P., Hollnagel, E., and Johnsen, S. P. (2015), "Accreditation and improvement in process quality of care: a nationwide study", *International Journal for Quality in Health Care*, Vol. 27 No. 5, pp. 336-343.

Braithwaite,J., Greenfield,D., Westbrook,J., Pawsey,M., Westbrook,M., Gibberd,R., Naylor,J., Nathan,S., Robinson,M., Runciman,B., Jackson,M., Travaglia,J., Johnston,B., Yen,D., McDonald,H., Low,L., Redman,S., Johnson,B., Corbett,A., Hennessy,D., Clark,J., Lancaster,J., (2010), "Health service accreditation as a predictor of clinical and organisational performance: a blinded, random, stratified study", *Quality & Safety in Health Care*, Vol 19 No. 1, pp. 14-21.

Chassin, M. R. (2013), "Improving the quality of health care: what's taking so long?", *Health Affairs, Vol. 32 No.*10, pp. 1761-1765.

Dean Beaulieu, N., and Epstein, A. M. (2002), "National committee on quality assurance health-plan accreditation: predictors, correlates of performance, and market impact", *Medical Care, Vol. 40 No.* 4, pp. 325-337.

DelliFraine, J. L., Langabeer, J. R., and Nembhard, I. M. (2010), "Assessing the evidence of six sigma and lean in the health care industry", *Quality Management in Health Care,* Vol. 19 No. 3, pp. 211-225.

Devers, K. J., Pham, H. H., and Liu, G. (2004), "What is driving hospitals' patient-safety efforts?", *Health Affairs,* Vol. 23 No.2, pp. 103-115.

Diab, S. M. (2011), "The extent to which Jordanian doctors and nurses perceive the accreditation in private hospitals", *International Journal of Marketing Studies,* Vol. 3 No.1, pp. 78-94.

Duckett, S. J. (1983), "Changing hospitals: the role of hospital accreditation", *Social Science and Medicine*, Vol. 17 No. 20, pp. 1573-1579.

El-Jardali, F., Jamal, D., Dimassi, H., Ammar, W., and Tchaghchaghian, V. (2008), "The impact of hospital accreditation on quality of care: perception of Lebanese nurses", *International Journal for Quality in Health Care*, Vol. 20 No. 5, pp. 363-371.

Fukuda, H., Imanaka, Y., Hirose, M., and Hayashida, K. (2009), "Factors associated with system-level activities for patient safety and infection control", *Health Policy*, Vol. 89 No.1, pp.26-36.

George, A. L., and Bennett, A. (2005), *Case studies and theory development in the social sciences*, MIT Press, Cambridge, Massachusetts.

Graham, N.O. (1995), "Quality trends in health care", Graham, N.O., *Quality in health care: theory, application and evolution,* Aspen Publishers, Inc, Maryland, pp. 3-14.

Greenfield, D., and Braithwaite, J. (2008), "Health sector accreditation research: a systematic review", *International Journal for Quality in Health Care*, Vol. 20 No. 3, pp.172-183.

Greenfield, D., Pawsey, M., Hinchcliff, R., Moldovan, M., and Braithwaite, J. (2012), "The standard of healthcare accreditation standards: a review of empirical research underpinning their development and impact", *BMC Health Services Research*, Vol. 12, pp.329

Hadley, T. R., & McGurrin, M. C. (1988), "Accreditation, certfication, and the quality of care in state hospitals", *Psychiatric Services*, Vol. 39 No. 7, pp. 739-742.

Hammersley, M. (2001), *What's wrong with ethnography?: Methodological explorations*. Routledge, London.

Hinchcliff, R., Greenfield, D., Moldovan, M., Westbrook, J. I., Pawsey, M., Mumford, V., and Braithwaite, J. (2012), "Narrative synthesis of health service accreditation literature", *BMJ Quality & Safety*, Vol. 21 No.12, pp. 979-991.

Hinchcliff, R., Greenfield, D., Westbrook, J. I., Pawsey, M., Mumford, V., and Braithwaite, J. (2013), "Stakeholder perspectives on implementing accreditation programs: a qualitative study of enabling factors", *BMC Health Services Research*, Vol.13, pp. 437

Hosford, S. B. (2008), "Hospital progress in reducing error: the impact of external interventions", *Hospital Topics*, Vol. 86 No. 1, pp. 9-20.

Jaafaripooyan, E. (2011), Contextual approach to the performance analysis of Iran's national accreditation programme for healthcare organisations, Unpublished PhD Thesis, University of Southampton, School of Management, Southampton.

Kaplan, H. C., Brady, P. W., Dritz, M. C., Hooper, D. K., Linam, W., Froehle, C. M., and Margolis, P. (2010), "The influence of context on quality improvement success in health care: a systematic review of the literature", *Milbank Quarterly*, Vol. 88 No.4, pp. 500-559.

Kilo, C. M. (1998), "A framework for collaborative improvement: lessons from the institute for healthcare improvement's breakthrough series", *Quality Management in Healthcare,* Vol. 6 No.4, pp. 1-14.

Kohn, L. T., Corrigan, J., and Donaldson, M. S. (2000), *To err is human: building a safer health system,* National Academy Press, Washington, D.C.

Longo, D. R., Hewett, J. E., Ge, B., Schubert, S., and Kiely, R. G. (2007), "Hospital patient safety: characteristics of best-performing hospitals", *Journal of Healthcare Management*, Vol. 52 No.3, pp. 188-204.

Lutfiyya, M. N., Sikka, A., Mehta, S., and Lipsky, M. S. (2009), "Comparison of US accredited and non-accredited rural critical access hospitals", *International Journal for Quality in Health Care*, Vol. 21 No. 2, pp. 112-118.

Maxwell, J. A. (2012), *Qualitative research design: an interactive approach,* 3rd ed., Sage, London.

McLaughlin, C. P., and Kaluzny, A. D. (2004), *Continuous quality improvement in health care: Theory, implementation, and applications*, 2nd ed., Jones and Bartlett Learning, Sudbury.

Miller, M. R., Pronovost, P., Donithan, M., Zeger, S., Zhan, C., Morlock, L., and Meyer, G. S. (2005), "Relationship between performance measurement and accreditation: implications for quality of care and patient safety", *American Journal of Medical Quality,* Vol. 20 No. 5, pp. 239-252.

Morse, J. M. (1997), *Preventing patient falls*, Sage Publications, Thousand Oaks, Calif.

Morris, S. (2001), "Joint and individual interviewing in the context of cancer", *Qualitative Health Research*, Vol. 11 No. 4, pp. 553-567.

Polak, L. and Green, J. (2016), Using joint interviews to add analytic value, *Qualitative Health Research*, Vol. 26 No. 12, pp. 1638-1648

Pomey, M., Contandriopoulos, A., François, P., and Bertrand, D. (2004), "Accreditation: a tool for organizational change in hospitals?", *International Journal of Health Care Quality Assurance*, Vol. 17 No. 3, pp. 113-124.

Pomey, M., Lemieux-Charles, L., Champagne, F., Angus, D., Shabah, A., and Contandriopoulos, A. (2010), "Does accreditation stimulate change? a study of the impact of the accreditation process on Canadian healthcare organizations", *Implementation Science,* Vol. 5 Article No.31

Ribeiro, J. M. (2004), "Reforma do sector público hospitalar: Programa de empresarialização de 34 hospitais portugueses", *Revista Portuguesa de Saúde Pública*, Vol. 4, pp. 65-77.

Rooney, A. L., and Van Ostenberg, P. R. (1999), *Licensure, accreditation, and certification: Approaches to health services quality,* Quality Assurance Project, USAID, Bethesda, MD.

Rossman, G. B. and Rallis, S. F. (2003), *Learning in the field: an introduction to qualitative research*, Sage Publications, Thousand Oaks, Calif.; London.

Saleh, S. S., Bou Sleiman, J., Dagher, D., Sbeit, H., and Natafgi, N. (2013), "Accreditation of hospitals in Lebanon: is it a worthy investment?", *International Journal for Quality in Health Care*, Vol. 25 No. 3, pp. 1-7.

Salmon, J. W., Heavens, J., Lombard, C., and Tavrow, P. (2003), *The impact of accreditation on the quality of hospital care: KwaZulu-Natal province Republic of South Africa,* Quality Assurance Project, USAID, University Research Co., Bethesda: MD

Schmaltz, S. P., Williams, S. C., Chassin, M. R., Loeb, J. M., and Wachter, R. M. (2011), "Hospital performance trends on national quality measures and the association with joint commission accreditation", *Journal of Hospital Medicine*, Vol. 6 No.8, pp. 454-461.

Schouten, L. M., Hulscher, M. E., van Everdingen, J. J., Huijsman, R., and Grol, R. P. (2008), "Evidence for the impact of quality improvement collaboratives: systematic review", *British Medical Journal,* Vol. 336 No.7659, pp. 1491-1494.

Shaw, C., Groene, O., Mora, N., and Sunol, R. (2010), "Accreditation and ISO certification: do they explain differences in quality management in European hospitals?", *International Journal for Quality in Health Care*, Vol.22 No. 6, pp. 445-451.

Spencer, L., Ritchie, J., Ormston, R., O' Connor, W., and Barnard, M. (2014), "Analysis: principles and processes", Ritchie, J., Lewis, J., Nicholls, C.M. and Ormston, R., *Qualitative research practice: a guide for social science students and researchers,* 2nd ed., Sage, London, pp. 269-293.

Taylor, M. J., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., and Reed, J. E. (2014), "Systematic review of the application of the plan-do-study-act method to improve quality in healthcare", *BMJ Quality & Safety*, Vol. 23 No. 4, pp. 290-298.

Thor, J., Lundberg, J., Ask, J., Olsson, J., Carli, C., Härenstam, K. P., and Brommels, M. (2007), "Application of statistical process control in healthcare improvement: Systematic review", *Quality and Safety in Health Care*, Vol. 16 No.5, pp. 387-399.

Thornlow, D. K., and Merwin, E. (2009), "Managing to improve quality: the relationship between accreditation standards, safety practices, and patient outcomes", *Health Care Management Review*, Vol. 34 No. 3, pp. 262-272.

Touati, N., and Pomey, M. (2009), "Accreditation at a crossroads: are we on the right track?", *Health Policy*, Vol. 90 No. 2, pp.156-165.

Vincent, C. (2011), *Patient safety*, 2nd ed., John Wiley & Sons, Chichester.

World Health Organisation. (2003), *Quality and accreditation in health care services: a global review,* Department of Health Service Provision, Geneva.

Yin, R.K. (2013), *Case study research: design and methods*, Sage, Thousand Oaks,

California.

9. Permissions checklist

Please note that Emerald requires you to clear permission to re-use any material not created by you. **Emerald is unable to publish your paper with permissions outstanding.**

Please ensure you have done the following: (please tick C)

Cleared permission to use any material (including content freely available on the web) not authored by you. This applies to tables/illustrations/figures/photographs and excerpts of more than 400 words. Please attach evidence to this form.	V
Included full references for all tables/illustrations/figures/excerpts. (Please refer to the Author Guidelines for advice on correct acknowledgement).	V
Cleared permission with the copyright holder, if any adaptation is significantly similar to the original material	V
Cleared permission with any company if you have included a photograph of a logo or product.	V
Cleared permission with the creator(s) of any photograph(s), if not taken by you.	V
Where possible, cleared permission with the subject(s) of any photograph(s).	V
Cleared permission to use any material authored by you, if you have assigned copyright to another party.	V

Emerald is a member of the STM Association and participates in the reciprocal free exchange of material with other STM members. This may mean that in some cases, authors do not need to clear permission for re-use of content. Authors should check the STM website to find participating publishers and follow STM's permissions guidelines. See: http://www.stm-assoc.org/copyright_and_legal_permissions_guidelines.php