

## The Indicators of Board Evaluation in Healthcare Organizations: A Review of Evidence

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**Abstract:** Existing evidence about the indicators of board performance evaluation in the healthcare organizations demonstrated that a comprehensive review of literature is still required to broaden our understanding of this topic. This review aimed to add to the literature on performance evaluation of the boards by providing a summary of literature-based perspectives. Using a systematic search strategy, ten eligible papers were entered into the review. Thirty-five indicators of board performance evaluation in the healthcare organizations were identified in these papers. We illustrated more about these indicators in the paper. Our results showed a gap in the literature with respect to the performance evaluation of the health boards. Given the unique context of the health organizations, it is suggested that more research need to be done in order to understand the indicators of the board performance evaluation.

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### Introduction

Nowadays, interest in the concept of governance has widely grown. In light of this development, as every organization, the healthcare organizations recognize the need for good governance (NHS confederation, 2005). Governance is described as "a form of control that aligns the principal and agent to maximize organizational effectiveness" (Jones, 2007). It is said that a critical component of good governance in organizations that are governed by boards, refers to performance evaluation of its boards (Blomberg, Harmon, & Waldhoff, 2004). That is because boards have an important role in organization governance. Furthermore, governing boards are under greater scrutiny than ever before and are being held to higher levels of accountability (McDonagh & Umbdenstock, 2006).

Given this importance, the question of how boards can assess their performance has recently received increasing attention. Measuring board performance is obviously a difficult activity (Collier, 2004), but its importance cannot be overemphasized. Assessment of the board performance can help a board to operate more efficiently as member are able to identify the board's strength and weakness and adopt practices that may improve effectiveness. Therefore, improving the board's performance can lead to greater organization effectiveness (Collier,

2004; Kiel & Nicholson, 2005; Minichilli, Gabriellsson, & Huse, 2007; Swiecicki, 2011).

As every performance evaluation, deciding what to evaluate is difficult, but critical component of the board performance evaluation process. Some scholars have focused attention on board performance and contributed to the literature on evaluation criteria and approaches (Greiling, 2006; Tarmina & H.Gao, 2009). A review of this literature indicates there is now a growing literature on this topic, especially outside the health sector, but still relatively scanty within the health sector. Hence, a more comprehensive review of literature is still required to broaden our understanding of the indicators of board performance evaluation in healthcare organizations. Such review can help to direct future research works. The purpose of this article was to add to the literature on performance evaluation of the health governing boards by providing a summary of literature-based perspectives.

To accomplish this task, the authors focus on identifying the indicators of the board performance evaluation in different organizations in health sector. The paper encapsulated findings from research conducted on evaluation of governing board performance across the world and identified themes and areas that may warrant further investigation and

discourse. The specific focus of the review undertaken in this study is as follows:

- synthesize the key theoretical frameworks and models of the performance evaluation of boards used by authors;
- identify the indicators of the performance evaluation of boards; and
- provide recommendations for future empirical studies of board's performance.

### Materials and methods

The scope of this review was to seek evidences relating to evaluating board performance in the healthcare organizations. We considered only empirical studies (till 2011) undertaken in different organization of health sector published in English language. Different strategies used to identify relevant studies including searching of electronic databases, reference scanning of relevant papers, hand-searching of the key journals and consultations with experts.

Several key databases were searched including Web of Science; ScienesDirect; Emerald; ProQuest Dissertations & Theses; HMIC (Health Management Information Consortium via Ovid); Medline (Via Ovid) and Google scholar. Finally, a general Internet search using Google and Yahoo search engines was undertaken to find further information from unpublished research studies. Keywords to search the literature were:

- trustees, boards, governing board, governing body, directors, councils, regents
- evaluation, assessment, appraisal, measurement, effectiveness, mentoring, development
- performance

Where authors' names were known, these were used to search electronic databases. The initial search was conducted in December 2011 and got updated in September 2012. To eliminate duplication, results from the different databases were placed into an Endnote software package. A data extraction form was designed to extract details concerning the aims of the study, setting, study design, participants, method of data collection and analysis, reported findings and implications for the research and policy. To assess the quality of the quantitative studies, CASP checklist (Hannes, 2011) was used. Quality assessment of quantitative studies was done through the checklist which is available for cross-sectional studies. Because the literature on the board performance evaluation was mainly discursive and the studies rarely include objective measurable outcomes commonly used in quantitative research, a narrative approach was used to synthesize the results of the studies.

As this paper was a part of PhD dissertation, searching, extracting, quality assessment and synthesizing was done by HSS under the supervision of research team.

### Results

*Description of Studies:* Once duplicates were removed, the search identified 5714 papers. During the initial stage, 5592 papers were excluded on examination of the title and abstract. In the next stage, the complete texts of the remaining papers (122) were assessed against the inclusion criteria and a further 110 studies were excluded. Moreover, two studies could not be included, due to failure to access their full text in spite of three pursuing continually. Finally, 10 primary studies were included. A detailed summary of the included studies is presented on Table 1.

Table 1 here

*Time and place of publication:* Regarding to the time of publication, there has been a growing interest in this topic since the later 2000s. Most studies have been carried out in USA (Andrews, 2006; Blomberg et al., 2004; Fletcher, 1991; Kane, clark, & Rivenson, 2008; Langabeer & Galeener, 2008; McDonagh & Umbdenstock, 2006), The UK (Chambers, Benson, Boyd, & Girling, 2012; NHS Confederasion, 2005), Australia (Duncan-Marr & Duckett, 2005) and Iran (Damari, Aminlou, Farzan, Rahbari, & Alikhani, 2010) were the place of rest publications.

*Aims of the Studies:* The aims of the studies were different. Two focused only on identifying indicators of the board performance evaluation (Fletcher, 1991; Kane et al., 2008). One study focused only on evaluating the board performance (McDonagh & Umbdenstock, 2006). The remaining seven studies explored both identifying the board performance indicators and evaluating the board performance on the basis of the identified indicators (Andrews, 2006; Blomberg et al., 2004; Chambers et al., 2012; Damari et al., 2010; Duncan-Marr & Duckett, 2005; NHS Confederasion, 2005; Langabeer & Galeener, 2008).

*Research Methods Used in the Studies:* The most common research method in included studies was survey quantitative (Andrews, 2006; Damari et al., 2010; Duncan-Marr & Duckett, 2005; Fletcher, 1991; McDonagh & Umbdenstock, 2006). The qualitative methods had been employed in three studies (NHS Confederasion, 2005; Kane et al., 2008; Langabeer & Galeener, 2008). Two studies employed mix method (qualitative-quantitative) to reach their objectives (Blomberg et al., 2004; Chambers et al., 2012). These qualitative studies have used single case study and content analysis. Questionnaire, interviews, document

analysis, observations and focus group were employed in these studies to gather data.

*Theoretical Frameworks Used in the Studies:* Except one study (McDonagh & Umbdenstock, 2006) which has been employed Chait et al. framework, the rest studies had no explicit theoretical framework to explain the board performance evaluation.

*The Performance Evaluation Type of the Studies:* The mainly method of evaluation was self-assessment (Andrews, 2006; Blomberg et al., 2004; Damari et al., 2010; McDonagh & Umbdenstock, 2006). Assessment by others was employed to the board performance evaluation in three studies (Chambers et al., 2012; NHS Confederation, 2005; Langabeer & Galeener, 2008). Only one study (Duncan-Marr & Duckett, 2005) has used a combination of self-assessment and assessment by others methods for evaluating the board performance.

*The Indicator of the Board Performance Evaluation:* Thirty-five indicators identified in the literature to evaluate the health board. We categorized them in seven domains. A summary of these indicators from the review of the literature is provided in Table 2

Table 2 here

Trustees' domain: Twelve indicators were reported. The first two ones were related to trustees knowledge, awareness and understanding. These were trustees' awareness about their tasks, roles and responsibilities as a member of trustee board (Fletcher, 1991) and understanding the health context and culture (Andrews, 2006; McDonagh & Umbdenstock, 2006). Second two ones referred to trustees' competence. These competences were regarded as one of the board capital (Nicholson & Kiel, 2004). Two competence reported by the included studies were the analytical competence (McDonagh & Umbdenstock, 2006) and political competence (Blomberg et al., 2004; McDonagh & Umbdenstock, 2006). Trustees' participation was another indicator. Three indicators of trustees' involvement have been found in the included studies contain the time devoted to trusteeship affairs (Andrews, 2006; Duncan-Marr & Duckett, 2005; Fletcher, 1991; Kane et al., 2008; Langabeer & Galeener, 2008), timely and regular attendance at the board meetings (Fletcher, 1991) and active participation in the board meetings (Fletcher, 1991). Other identifies indicators in trustees' domain were trustees' commitment to the institution mission (Andrews, 2006; Duncan-Marr & Duckett, 2005), trustees' interest and willingness (Blomberg et al., 2004), trustees' external relationship (Blomberg et al., 2004; Duncan-Marr & Duckett, 2005), confidentially

(Andrews, 2006; Blomberg et al., 2004) and conflict of interest (Blomberg et al., 2004).

Leadership domain: leadership was the second domain. Given included studies, only one indicator could be defined for this domain. It was the strength and effectiveness of the board chair (NHS Confederation, 2005; Fletcher, 1991; Kane et al., 2008).

Structure domain: Unlike the two prior domains that focused on individual characteristics, structure domain concentrated more on board as whole. Considering whole board characteristics for evaluation its performance is important. Four different indicators of the board performance evaluation were identified in some of the studies: board size (Fletcher, 1991), the board composition (Chambers et al., 2012; Damari et al., 2010; Fletcher, 1991), use of structure committee (Damari et al., 2010; Duncan-Marr & Duckett, 2005; Fletcher, 1991) and organization age and size (Fletcher, 1991).

Process domain: Eight indicators were found. Three indicators related to board meeting. It is obvious that most of the board responsibilities and tasks were done in the board meetings. Additionally, Board meetings include social events and provide opportunities to develop camaraderie (Kezar, 2006). These three indicators were the agenda quality and the quantity, qualify, timeliness and relevance supporting information of agenda items (Chambers et al., 2012; Duncan-Marr & Duckett, 2005), well-managed board meeting (Duncan-Marr & Duckett, 2005; Fletcher, 1991) and active, vigorous and sufficient debates and discussion of key issues in board meetings (NHS Confederation, 2005; Kane et al., 2008). Other indicators of process domain were the process of trustees' member selection and appointment as well as re (de)selection (Chambers et al., 2012; Damari et al., 2010; Fletcher, 1991), the CEO/president selection (Andrews, 2006; Langabeer & Galeener, 2008), board orientation (Fletcher, 1991), board education (Andrews, 2006; Blomberg et al., 2004; Chambers et al., 2012; Fletcher, 1991; Kane et al., 2008; McDonagh & Umbdenstock, 2006) and the board evaluation process (Blomberg et al., 2004).

The board dynamic domain: Five indicators were identified in this domain. Most of these indicators were focused on board relationships including the trustees' interpersonal relations (Andrews, 2006; Blomberg et al., 2004; Duncan-Marr & Duckett, 2005; NHS Confederation, 2005; Kane et al., 2008; McDonagh & Umbdenstock, 2006), CEO/president and trustees relations (Blomberg et al., 2004; Duncan-Marr & Duckett, 2005; Fletcher, 1991) and the CEO/president and board chair relations (Chambers et al., 2012). Board position in the health organization (Langabeer & Galeener, 2008) and

information sharing (Kane et al., 2008) were other identified indicators.

**Outputs domain:** Three indicators were defined. The first was related to the main outputs of the boards which are various functions or tasks the board performs and the degree boards are successful in carrying out their tasks (Blomberg et al., 2004; Chambers et al., 2012; Damari et al., 2010; Duncan-Marr & Duckett, 2005; NHS Confederation, 2005; Fletcher, 1991). The most board functions, recognized by reading included studies, were financial resources management (Blomberg et al., 2004; Duncan-Marr & Duckett, 2005; Fletcher, 1991) and quality control of provided services (Andrews, 2006; Blomberg et al., 2004; Duncan-Marr & Duckett, 2005). The quality (Andrews, 2006; Blomberg et al., 2004; Damari et al., 2010; Duncan-Marr & Duckett, 2005; NHS Confederation, 2005; Fletcher, 1991; McDonagh & Umbdenstock, 2006) and the extent to which enactments have been enforced (Damari et al., 2010), were rest indicators that pointed by some of included studied.

**Outcomes domain:** Two indicators were identified. The first was CEO/ president performance (Andrews, 2006; Blomberg et al., 2004; Fletcher, 1991). This indicator has been included in the board performance evaluation because the president is the representative of the board and responsible for implementing board's decisions. The second was found as the extent to which the institutions goals have been achieved. One study has been pointed to this indicator (Damari et al., 2010).

## Discussion

This was the first comprehensive, system-based literature review exploring the indicators of board performance evaluation in healthcare organizations. This study synthesized the available evidence within health sector and compares it with the existing literature derived from the other sectors. We have highlighted key issues with respect to the theoretical frameworks and have summarized the results of the selected studies. These are discussed each in turn as follows.

First of all, related to *the nature of studies*, the review of the evidence showed that, most of current literature about the board performance evaluation of the healthcare organizations were descriptive, based on writer's perspective. Few of the articles on trusteeship and their evaluation were based on empirical data. Such limitation has been observed beyond the health sector (Cornforth, 2001; Kezar, 2006). This phenomenon is changing as new studies based on empirical investigations are emerging. As our review indicated, the number of board performance studies has been increasing since 2000.

However, although the number of studies is increasing, none of the articles found by these authors utilized a comprehensive approach to the study of board performance evaluation.

The second finding of this review was related to *the frameworks of the board performance evaluation*. Similar to the literature outside the health sector, the reading of the selected studies reveals that there is no agreement among researchers on the best, integrated and comprehensive framework for identifying, measuring and discussing the board performance evaluation (Selim, Verity, & Brewka, 2009). It seems that the differences in context in which board operates are responsible for this. The role of the context and its relationship with effective board performance has been examined by prior researches (Conger, Lawler, & Finegold, 2001; Robinson, 2001). So, special attention is recommended to develop and use an appropriate and framework for the board performance evaluation given the context.

The final findings of our review concerned about *the indicators of the board performance evaluation*. Most of identified indicators in health sector aligned with those in other sectors. This similarity was especially more in indicators of structure, process, board dynamic and output domains. Most of these domains' indicators were well-researched characteristics as that are considered to have an important impact on the board performance. Less similarity observed on indicators of the trustees and leadership domains. It is worth noting that the number of identified indicators related to the trustees' domain in health sector was more. In addition, many studies have emphasized on these indicators to evaluate board performance. It seemed that the number of the identified trustees' indicators as well as the studies which have focused on them, were less beyond the health sector. Finally, at least similarity was emerged in output's indicators. While the number of studies which have considered output's indicators for the evaluation of health board performance was a handful, many studies, especially in corporate literature, have considered these indicators for the board evaluation. As we discussed former, it perhaps because of simplicity of defining and measuring outputs indicators in corporate sector. In corporate literature, the long-term financial succession was the most frequent indicator that regarding the mission of the healthcare organizations cannot be studied as an indicator for the board performance.

## Conclusion

We have reviewed literature and explored domains and indicators that we believed they are critical in determining the health board performance.

The key conclusion which can be drawn from this literature is that there is no "one best approach/framework" for evaluation the board performance, since the indicators of the board performance depend on institution context. However, it seems that using comprehensive framework such as input-process-output framework can be more useful. It is because this framework is a generalized one and can assist us to conceptualize how boards work and what we can do in order to improve board performance in every context. This framework also considered board performance indicators as a set of interrelated dimension where a change in one dimension affects others. As a result, board performance problems can be diagnosed and based on it, suitable plans for board performance improvement are proposed. Lastly, employing this framework can cover both individual and whole level of the board for the performance evaluation.

This review also revealed a gap in the literature with respect to the performance evaluation of the health governing boards. Given the unique context of healthcare organizations, it is suggested that more research need to be done in order to understand the indicators of the board performance evaluation. Additionally, regarding the methodology, this review highlights difficulties of the review for non-experimental studies: searching (particularly electronic databases); quality assessment; and data synthesis. With all of these issues, it seems that more methodological development is required. The gap in using mix qualitative and quantitative research design to investigate the content of the health board performance evaluation is apparent from this review, too. We also found the vast majority of identified indicators concentrated exclusively on the trustees or CEO/president as the sole sources of information for the board performance evaluation. Hence, the need for more comprehensive research design inquiry is strengthened.

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Table 1 A Summary of the Selected Studies

Authors	setting	Sample	Data Sources	Methodology
Fletcher, 1991	US	282 executive directors	questionnaire	quantitative (survey)
Blomberg et al., 2004	US	91 trustees	interview questionnaire	qualitative (case study) quantitative (survey)
Duncan-Marr et al., 2005	Australia	trustees	questionnaire	quantitative (case study)
NHS confederation, 2005	UK	Trustees of 12 NHS organizations	interview observation	qualitative
McDonagh et al., 2006	US	486 trustees and CEOs (RR: 31%), purposively	questionnaire	quantitative (survey)
Andrews et al., 2006	US	12 trustees and 4 board committees	questionnaire observation	quantitative (case study)
Kane et al., 2008	US	73 trustees and CEOs of 71 hospital, purposively	Interview	qualitative (case studies)
Langabeer et al., 2008	US	50 hospitals, randomly	observation document analysis	qualitative
Damari et.al, 2010	Iran	860 enactments, trustees and the officers in charge of board secretariats	questionnaire	quantitative
Chambers et al., 2012	UK	232 trustees (RR: 31%) and 147 CEOs (RR: 77%)	interview, focus group, questionnaire	qualitative quantitative

Table 2 A Summary of Identified Board Performance Evaluation's Indicators

<b>domain</b>	<b>Indicator</b>
Trustees	<i>their tasks, roles and responsibilities</i> <i>the health context and culture</i> <i>analytical competence</i> <i>political competence</i> <i>the time devoted to trusteeship affairs</i> <i>level of attendance at the board meetings</i> <i>active participation in the board meetings</i> <i>commitment to the institution mission</i> <i>interest and willingness</i> <i>external relationship</i> <i>confidentiality</i> <i>conflict of interest</i>
Leadership	<i>strength and effectiveness of the board chair/leadership style</i>
Structure	<i>board size</i> <i>board composition</i> <i>use of committee structure</i> <i>organizational characteristics</i>
Process	<i>the agenda and supporting information of agenda items</i> <i>well-managed board meeting</i> <i>debates and discussion of key issues in board meetings</i> <i>trustees' member selection and appointment</i> <i>the CEO/president selecting</i> <i>board orientation</i> <i>board education</i> <i>the process of ongoing board evaluation</i>
Board dynamic	<i>trustees' interpersonal relations</i> <i>CEO/president and trustees relations</i> <i>CEO/president and board chair relations</i> <i>position</i> <i>information sharing</i>
Output	<i>board's functions</i> <i>enactments quality</i> <i>the extent to which enactments have been enforced</i>
Outcome	<i>CEO/ president performance</i> <i>the extent to which the institutions goals have been achieved</i>

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