



# A theoretical framework for holistic hospital management in the Japanese healthcare context



Hu-Chen Liu\*

Department of Industrial Engineering and Management, Tokyo Institute of Technology, Tokyo 152-8552, Japan

## ARTICLE INFO

### Article history:

Received 4 February 2013

Received in revised form 25 August 2013

Accepted 30 August 2013

### Keywords:

Hospital management

Holistic management

Performance measurement

Performance indicators

Systematic review

## ABSTRACT

**Objective:** This paper develops a conceptual framework for performance measurement as a pilot study on holistic hospital management in the Japanese healthcare context.

**Methods:** We primarily used two data sources as well as expert statements obtained through interviews: a systematic review of literature and a questionnaire survey to healthcare experts. The systematic survey searched PubMed and PubMed Central, and 24 relevant papers were elicited. The expert questionnaire asked respondents to rate the degree of “usefulness” for each of 66 indicators on a three-point scale.

**Results:** Applying the theoretical framework, a minimum set of performance indicators was selected for holistic hospital management, which well fit the healthcare context in Japan. This indicator set comprised 35 individual indicators and several factors measured through questionnaire surveys. The indicators were confirmed by expert judgments from viewpoints of face, content and construct validities as well as their usefulness.

**Conclusion:** A theoretical framework of performance measurement was established from primary healthcare stakeholders' perspectives. Performance indicators were largely divided into healthcare outcomes and performance shaping factors. Indicators in the former category may be applied for the detection of operational problems, while their latent causes can be effectively addressed by the latter category in terms of process, structure and culture/climate within the organization.

© 2013 Elsevier Ireland Ltd. All rights reserved.

## 1. Introduction

In the last few decades, various issues have been raised in the healthcare sector along with changing healthcare landscape. Adverse events in healthcare have still been one of the most crucial social problems [1]. In addition, healthcare officers and authorities have continuously received strong pressures for cost containment due to increase of expenditure that are attributed to aging population, nature of contemporary diseases and the extensive use of costly biomedical technology [2]. They have been required

to achieve higher efficiency and effectiveness in providing services to their clients [3]. Consequently, healthcare providers must work long hours [4], which causes them excessive workload and fatigue, and in turn leads to lower motivation and satisfaction with work [5]. Each of these managerial issues has been typically handled independently by a different section, although they are closely inter-related and their contributing factors may often be the same. For instance, continuous long-hour work may, on the one hand, temporarily yield positive effects on higher equipment utilization and reduced personnel expenditure, but it must lead, on the other, to higher risk of medical errors [6]. As another important issue, no or only a few organizations, particularly small-sized hospitals and clinics, have a specific unit that formally takes charge of managerial issues, but simply clerical matters. Therefore, it is of critical importance to address various management

\* Correspondence to: Department of Industrial Engineering and Management, Tokyo Institute of Technology, 2-12-1 Oh-okayama Meguro-ku, Tokyo 152-8552, Japan. Tel.: +81 3 5734 2245; fax: +81 3 5734 2947.

E-mail address: [huchenliu@foxmail.com](mailto:huchenliu@foxmail.com)

issues from *holistic* points of view, e.g., from daily operations management and patient safety activities to strategic planning and decisions for the hospital's future goals.

As evidence for how well organizational objectives or goals are achieved, *performance measurement* has been emerged in recent decades in healthcare, using performance indicators [6,7]. In response, there have been a number of national projects specifically conducted in Western countries, e.g., USA [8], UK [9,10], Denmark [11] and Australia [12], as well as several international projects initiated, for instance, by WHO [13] and OECD [14]. As summarized by Groene et al. [15], each indicator project had different purposes and therefore used a different assessment model which comprised a different set of dimensions, including various numbers of performance indicators. It was suggested that there has been yet no framework unanimously accepted as a tool for measuring quality and performance of healthcare services [16].

Regardless of potential benefits from performance indicators, several difficulties and disadvantages have been pointed out for their applications to hospital management. Most performance measurement frameworks or tools included a large number of indicators, and therefore great efforts were required to collect voluminous data for indicators [17]. Moreover, hospital managers and decision makers constantly suffered a problem for selecting proper ones among a vast, diversified set of indicators [18]. These efforts must have led to *administration fatigue* and *information overload* [19]. As a result, performance measurement systems have been universally acknowledged to work poorly and viewed negatively by both hospital managers and employees [20]. These negative views – and actually poor performance – of performance measurement were primarily derived from a number of indicators that will be never used but must be collected. Therefore, it is very necessary to determine a *limited number* of essential indicators which meet management purposes of the organization.

Although many quality improvement frameworks have been developed in Western countries, relatively few in Japan (but see [21]). Several studies have shown that differences in national culture make it questionable to transfer results across cultural borders [22,23]. In this paper, we report a conceptual framework for performance measurement as a pilot study on holistic hospital management in the Japanese healthcare context. The conceptual framework was created and a minimum set of indicators were determined by the use of a systematic review of literature and a questionnaire survey to healthcare experts. We also discuss implications of the theoretical framework with respect to its application to actual settings.

## 2. Methods

### 2.1. Theoretical framework

The schematic illustration of the theoretical framework for holistic hospital management is shown in Fig. 1. In this paper, an indicator is referred to indication of a specific state or phenomenon which can be *quantitatively* measured or assessed. A sub-indicator is defined as indication

of the same state or phenomenon as its superordinate indicator, but more specifically stated based on a case or condition such as professional group, disease, procedure and period. As taxonomy of performance indicators, the framework involves two primary axes of indicator characterization: stakeholder perspective and assessment property.

Various stakeholders such as patients, families/relatives, employees, hospital owners, leaders and managers, policy makers, authorities and related industries (e.g., pharmaceutical and medical equipment firms) are involved in the modern healthcare sector. Healthcare performance is required to capture from perspectives of various important stakeholders. In this paper, we selected the following three groups as key healthcare stakeholders particularly for hospital management: patient (including family and relative), employee, and management. On the one hand these stakeholders are active players within healthcare and as influential external actors, all of them, on the other, have different interests in health and related issues.

The theoretical framework developed in this study took a comprehensive approach to classification of assessment properties, adopting a hierarchical structure with various managerial characteristics in healthcare. As for assessment properties, the theoretical framework involves a total of eight aspects. These aspects are largely divided into two categories: healthcare outcome and performance shaping factor (PSF). The former category was composed of five aspects related to consequences directly or indirectly derived from activities and operations within a hospital. These five aspects are satisfaction, health status, safety/quality, time/efficiency and effectiveness. This configuration of healthcare outcomes almost corresponds to the six aspects for hospital goals recommended by the Institute of Medicine [8]: safe, effective, patient-centered, timely, efficient and equitable. As Donabedian [24] stated that patient satisfaction is an expression of their judgments on all aspects, performance results of the “satisfaction” aspect may be influenced by all other aspects of healthcare outcomes. Therefore, indicators from the satisfaction aspect may be a promising means when capturing overall hospital performance quickly but approximately.

The PSF category represents conditions or factors that may impact on healthcare outcomes. This category is composed by the following three aspects: structure, process and culture/climate. Donabedian's framework covered the first two aspects. However, there have been no or few frameworks that explicitly described “PSF” or related dimensions. It is well known that organizational culture – or a related concept, organizational climate, which is referred to as its surface manifestation – is correlated with various indices of organizational performance [25]. Taking the safety aspect as an outcome property, for instance, it has been well acknowledged that safety performance is affected not only by structural and process factors, but also by employee attitudes to and perceptions of their job roles and safety related issues, their organization and management, i.e., *safety culture* (e.g., [26]). Therefore, the framework proposed in this paper might be

Download English Version:

<https://daneshyari.com/en/article/6239888>

Download Persian Version:

<https://daneshyari.com/article/6239888>

[Daneshyari.com](https://daneshyari.com)