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Research Article

Development of Performance Indicators for Patient and Public Involvement in Hospital: Expert Consensus Recommendations Based on the Available Evidence

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Abstract

Purpose: Patient and public involvement has long been recognised as a cornerstone of clinical governance but the evidence-based evaluation of the progress and effectiveness of patient and public involvement in healthcare are limited. This study aimed to use available evidence and expert consensus to develop performance indicators of patient and public involvement in hospital.

Methods:A three-step process was used to develop the indicators. Firstly, key indicators and recommendations were identified from the literature and distributed over 5 domains: customer satisfaction, compliance management, customer orientation, voice of customer and patients' right. A multidisciplinary panel of medical professionals (n=8) rated and prioritized the indicators via two-round Delphi technique. Subsequently, the panel assessed the indicators at two consensus meetings.

Results: Of the 41 draft performance indicators, the expert panel members achieved positive consensus on 33 indicators. Also 2 indicators were developed on experts' opinions.

Conclusion: About 35 patient and public participation performance indicators were identified.Evidence support was available for most indicators. The set of indicators provide a baseline for patient and public involvement among stakeholders enabling them to evaluate and improve their accountability.

Introduction

Patient and public involvement has long been recognised as a cornerstone of clinical governance [1]. Healthcare organisations are now more likely than ever to seek patient and public involvement and feedback about the quality of the services provided [2]. Involving people in planning services and making decisions about local healthcare does increase their ownership of the health system and gives them more understanding of how the system operates and what problems it faces [3]. Furthermore, it not only redounds to increase efficiency of local and public resources and services use, but also increases accountability to tax-payers and better identification and providing their needs[2,4,5]. A succinct description of patient and public involvement (PPI) is offered by Kelson: patient involvement encompasses both individual involvement (for example, the central role of patients in decisions about their own health and care) and involvement at a more collective level (patient representatives, for example, actively contributing to health system policy and planning decisions)[4,6]. PPI is the active participation of patients, users, carers, community representatives and the public in the development of health services and as partners in their own health care[7]. If health care is to be truly patient-centred, patients must be provided with opportunities to influence the organization and delivery of services through involvement in service planning or evaluation[8]. When patient involvement does not occur, it may be due to a perceived lack of time or a lack of attitude and skills in providers to involve patients in decision making or lack of patient interest[5,9] . Literature shows that the patient involvement in health care can be accessed and improved in several ways, such as more supportive care and better communication, information supply and cooperation among physicians[10, 11]. To improve the quality of the patient involvement in health care, current practice needs to be reliably assessed [12]. Developing a valid set of patient-centred indicators is a first step towards improving the patient involvement in health care [13]. The PPI work plan must be reflected in key performance indicators and metrics agreed and monitored [14]. Performance measurement has become an increasingly common strategy worldwide [15] and is often measured by establishing indicators, or quantifiable standards, then assessing whether the organization of services, patterns of care, and outcomes are consistent with those criteria [16]. Indicators are usually derived through review of the medical literature and/or the consensus

of expert panels comprised of health professionals. The results of patient-centred healthcare indicators review illustrate the need for the development of a set of indicators for health systems to measure their patient centeredness [17]. The purpose of this study was to use available evidence and expert consensus to develop performance indicators of patient and public involvement in hospital.

Methods

A comprehensive literature review was conducted to identify suitable indicators. PubMed, Web of Knowledge, Cochrane Library, Science Direct and selected relevant websites from developed countries which had efforts on the topic; professional organizations (such as IAPO) and national Medical universities' and hospitals websites were searched and reviewed from November 2011 until June 2012. Key indicators were identified from national and international literatures and distributed over 5 domains: customer satisfaction, complaint management, customer orientation, voice of customer, patients' right. A Delphi questionnaire consisting of extracted indicators was rated in two rounds of Delphi method by a multidisciplinary panel of 8 experts: 2 professors of health services management, 1 epidemiologist, 1 PhD of medical records, 1 nurse, 2 general physicians and 1 social physician.The Delphi method was used to appraise the indicators based on the aspects of importance and feasibility. This method was developed in studies that RAND Corporation conducted in the 1950s. The objective was to develop a technique to obtain the most reliable consensus of a group of experts [18]. Linstone (1978) suggests that "a suitable minimum panel size is seven" ranging from 4 to 3000; however, the decision about panel size is empirical and pragmatic, taking into consideration factors such as time and expense [19]. The Delphi technique provides the opportunity to attain a collective view from individuals about issues where there is no or little definite evidence and where opinion is important. The process enables incorporation among individuals with diverse views. It is an iterative questionnaire exercise with controlled feedback to a group of panellists who are anonymous. The design avoids the often counterproductive group dynamics but allows panellists to reappraise their views in the light of the responses of the group as a whole [20].
In the first round, a tabulated list of indicators was sent to the members of the expert panel. The panel members were instructed to individually rate the indicators on a 9-point scale. In addition, panel members were encouraged to give specialized visions on indicators and also propose new indicators that supplemented 1 of 5 domains. In the second round of Delphi method, 11 indicators were rated by the members of the expert panel.

Analysis of the questionnaires

For each indicator, the experts' ratings were summarized into a median rating. In round 1, indicators with the median score less than 4 were excluded, score >4 and <7 were selected to the second round of Delphi and indicators with score of >7 were accepted as the final indicators. Also, two panel consensus meetings were established to finalize the indicators.

Results

Selection of indicators

The selection process resulted in the selection of 41 indicators. Identified indicators were assigned to the 5 domains of patient and public involvement in hospital: 7 were assigned to the domain of customer satisfaction, 11 to the complaint management, 11 to the patient orientation, 3 to the voice of customer, and 9 to the patient right.

Indicators rating by the expert panel, Delphi technique

The 41 indicators obtained from the selection procedure were rated by the expert panel in 2 rounds of Delphi.

According to the Delphi results, in round one, 26 indicators were classified as high priority and importance and were accepted as the final indicators. Two indicators on the consensus of the panel members were excluded. Also, 3 indicators were assimilated and accepted. Then 11 indicators were assigned to the round 2.

In round two, 1 indicator was excluded, 2 indicators were assimilated and then accepted, 2 were accepted and 4 indicators were accepted according to the revisions made on panel members' opinions in a consensus meeting.

Panel consensus meeting

Two panel consensus meeting were established and the experts discussed indicators. Some of the indicators were revised based on the panel members' opinions. Also, 2 indicators were developed based on panel members' opinions.

Finally 35 indicators were selected as patient and public involvement in hospital performance indicators (Table 1).

Table1. List of final accepted patient and public involvement indicators

Number	Domain	Indicator	References
1	Patient satisfaction	Inpatients satisfied by services (%)	[21-23]
2		Outpatients satisfied by services (%)	[22,23]
3		Patients satisfied by services in the emergency department (%)	[21, 23, 24]
4		Discharge against medical advice in the emergency department (%)	[21, 23-25]
5		Occupation satisfaction rate of nurses	[26,27]
6		Patients satisfied with the interaction (%)	[13]
7	Complaint management	Inpatient complaint rate/year	[28]
8		Outpatient complaint rate/year	[28]
9		Waiting time for responding to complaints (mean)	[28]
10		Closed complaint cases/year (%)	[28]
11		Complaint cases expressed in related commissions (%)	[28]
12		Complaint cases referred to law enforcement authorities (%)	[28]
13		Rate of Complaints received by the hospital from court	Expert panel
14		Complaint cases settled in the hospital (%)	[28]
15		Court decisions implementing rate	[28]
16		Staffs being educated about complaints (%)	[29]
17		Patients aware of complaints process (%)	[29]

18	Patient centeredness	Patients with information on their disease and treatment process (%)	[8, 13, 29, 30]
19		Patients involved in their own treatment decisions (%)	[8, 13, 30-335]
20		Patients satisfied with involving process in their own treatment decision making (%)	[22, 29, 36]
21		Patient education system availability	Expert panel
22		Quality improvement plans with patients' participation (%)	[35, 37, 38]
23		Staff educated about patient and public involvement (%)	[24, 36, 39]
24		Quality and safety report to community/year	[2, 8, 35, 40, 41]
25		Service evaluation processes with patient participation (%)	[2,8,36,37,42]
26		Strategic planning meetings by patients or representatives (%)	[2, 23, 32, 36, 37, 43]
27	Costumer voice	Patients' feedback about quality of services (written) (%)	[35]
28		Number of meetings with patients to get their feedback about services	[26, 30]
29		Quality improvement held on the basis of patient's feedback (%)	[26, 30, 37]
30	Patient rights	Patients having received sufficient information about medications, costs and (%)	[13, 44, 45]
31		Patients being sure about patient confidentiality and privacy (%)	[46]
32		Patients having received patients right brochure and education (%)	[45]
33		Patients knowing their own physician and nurse by name (%)	[13]
34		Patients knowing how to have access to their own physician (%)	[13, 31]
35		Patients having selected their own physician (%)	[29]

Discussion

The importance of measuring and following up results is also emphasized as important to the success of patient and public involvement [38]. Developing a valid set of performance indicators is a first step to measure and follow the patient and public involvement performance [13]. The use of indicators by health care organisations continues to be an important component of the Evaluation and Quality Improvement Programs [47]. Using an expert panel of medical professionals, this study systematically developed 35 performance indicators for patient and public involvement in hospitals in 5 important domains of customer satisfaction, complaint management, customer orientation, voice of customer and patients' right. These indicators provide useful base for evaluation and comparison of hospitals' performance regarding patient and public involvement. Ouwens and colleagues (2010), in their study in an effort to develop indicators of patient-centred cancer care, developed 26 indicators. These indicators, as they suggest, are used for quality assessment of cancer or chronic diseases [13]. Also Uphoff and colleagues (2012) developed 17 generic quality indicators for patient-centred cancer care using RAND modified Delphi method with expert panel [48]. Eight sets of current and proposed indicators for measuring patient-centred healthcare at the system level were identified in international alliance of patients' organizations study (2012) about patient-centred healthcare indicators [17] that were included in this study. Several health departments (in New South Wales, Queensland and Victoria) have sets of indicators to report on consumer participation embedded in their quality processes [49]. Quality Improvement Council (QIC), the Australian Council on Healthcare Standards (ACHS) and the National Consumer and Carer Forum of Australia [50] have consumer participation standards and indicators in their tools.

To achieve patient-centred healthcare, the International Alliance of Patients' Organizations (IAPO) Declaration on Patient-Centred Healthcare (PCH) [51] states that healthcare must be based on the following five principles, and these are being used as the basis for evaluating current practice and developing new patient-centred indicators: respect, choice and empowerment, patient involvement in health policy, access and support and information. Participation, occurring in a various range of contexts, has also a variety of purposes and methods. Measuring the success of participation needs to take these factors into account [49].

Indicators that were developed in this study include almost all of the five principles introduced by IAPO as well as considerations on the context. Indicators allow comparisons between services, against standards, or within the same agency over time and can be used to evaluate practice of patient and public involvement in hospitals. However, the performance indicators developed in this study should be viewed as preliminary, requiring further modifications then being adopted into practice.

This study is part of a wider project being undertaken by Tabriz University of Medical Science to develop a set of process and outcome indicators of clinical governance that can be applied by relevant stakeholders to measure the extent and quality of their work.

This study will help to provide a shared understanding and baseline for patient and public involvement among stakeholders enabling them to benchmark their work, and improve their approach and accountability.

Limitations: Evidences show that including patients in the development of indicators leads to the identification of issues that may not have been considered previously [13, 48]. However, no patient participated in the study as for our context and project particularity.

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