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## **E-SERVICE QUALITY OF HOSPITAL TO MEASURE PATIENT SATISFACTION**

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### **Abstract**

This research aims to design a model of e-service quality of hospitals. E-service quality of hospital can measure community satisfaction or in this research, the patient satisfaction. The Indonesian government uses the Community Satisfaction Index as a measurement standard to the level of community satisfaction of services provided by government agencies. In Indonesia, every hospital has to measure the Community Satisfaction Index regularly and report the result to the government and the public. The community satisfaction measured by the government and Service Quality (Servqual) of Parasuraman. The result of this research is a model of the Community Satisfaction Index survey which can help the hospital in Indonesia to regularly monitor the implementation. Hospitals can use the result of the measurement as a reference to improve their service quality to patients. Various hospitals in Indonesia can use this e-Service Quality of Hospital.

Keywords: Measurement, Satisfaction index, Service Quality.

## 1. Introduction

Hospital is an organization that provides health services to the public and must maintain its service quality. Nowadays, information systems or information technology has an innovative impact on all aspects of hospital services. Almost all of the hospital services can meet the needs and demands of their customers more effectively and efficiently [1-3]. Customers (patients) cannot use hospital services until they decide to be the hospital's patients [1]. The Indonesian government requires all hospitals in Indonesia to measure the level of customers' satisfaction and report the results to the public and the government regularly [4, 5].

In this study, customers are the patients, which can also mean the people of Indonesia. Customers' satisfaction depends on the service quality, which in line with the needs and demands of the customers. When the needs and requirements of customers fulfilled by the hospital, customers became satisfied, and their trust in the hospital increased [6, 7]. The loyalty of customers means that the customers can come back to the same hospital for healthcare in the future. It could happen because hospital management used the result of satisfaction measurement to increase their healthcare service [8].

According to Zeithaml and Parasuraman, service quality can be evaluated by finding the gap between the customer's perceived service quality and their expectations [7]. Besides that, the Indonesian government used the Community Satisfaction Index survey to evaluate the service quality of hospitals. Hazfiarini A used the Satisfaction Index to measure the hospital's services quality [8]. In this study, the Community Satisfaction Index used the indicators of service quality taken from the 14 elements of the government's Community Satisfaction Index and five quality service dimensions from Parasuraman [7-10].

## 2. Method

This study used an exploratory study method based on an in-depth literature study and observation. The preliminary work of this study is to identify the problems that occurred in the Community Index Survey system that has been carried out by two types of hospitals in Indonesia namely the public hospitals and special hospitals. In this study, hospital A in Bandung was chosen as a case study. The next step is the analysis of the hospital's Community Satisfaction Index using a literature study of government regulation documents and interviewing selected respondents from hospital A. Analysis of hospital service quality also done in the same way. Based on the result of the two analysis, the identification of e-service quality indicators shown in Fig. 1.

## 3. Results and Discussion

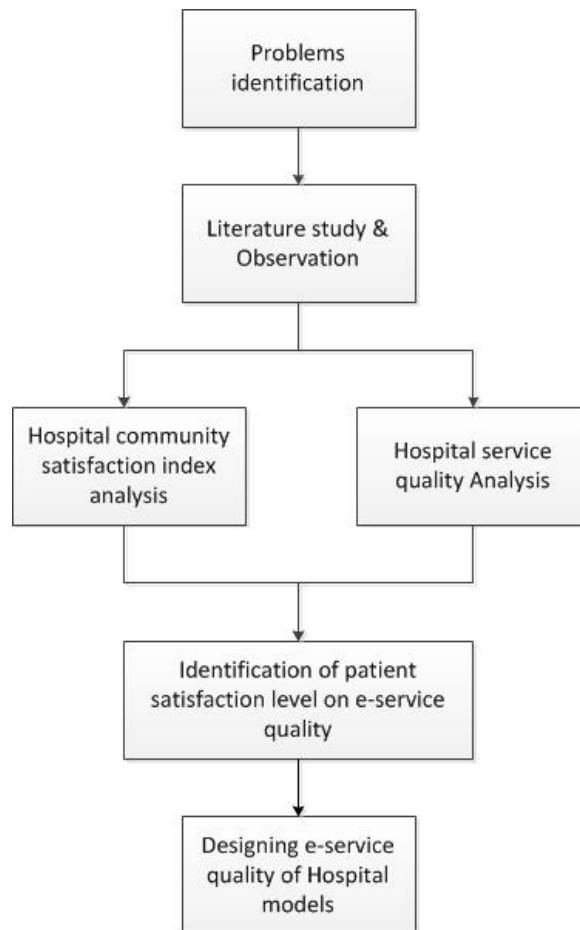
E-Service Quality of Hospital in this study is a system used to measure the patient satisfaction level of hospital services regularly. Calculating the customer satisfaction level with Service Quality (Servqual) methods can measure customer satisfaction [9].

Servqual method used five dimensions of service quality, namely tangibility, reliability, responsiveness, and assurance [11-13]. Besides, there are 14 elements

of the Community Satisfaction Index imposed by the Indonesian government, namely [10-15]:

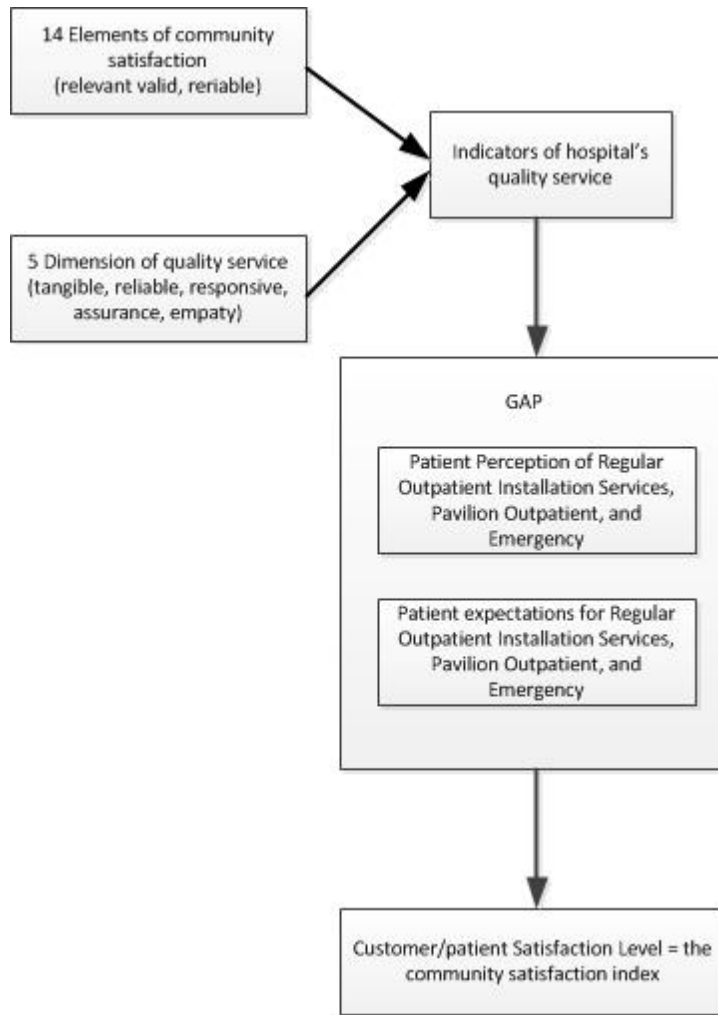
- a. Procedure of service
- b. Service requirement
- c. Clarity of service personnel
- d. Discipline and responsibility of service personnel
- e. The ability of service personnel
- f. The capability of service personnel
- g. Courtesy of service personnel
- h. Fairness of service cost
- i. Certainly of the service cost
- j. Certainly of the service schedule
- k. The convenience of the service environment
- l. Assurance of service

In this study, aligning between five dimensions of service quality and 14 elements of the Community Satisfaction Index can obtain the indicators used in the e-service quality (Fig. 2).



**Fig. 1. Methodology.**





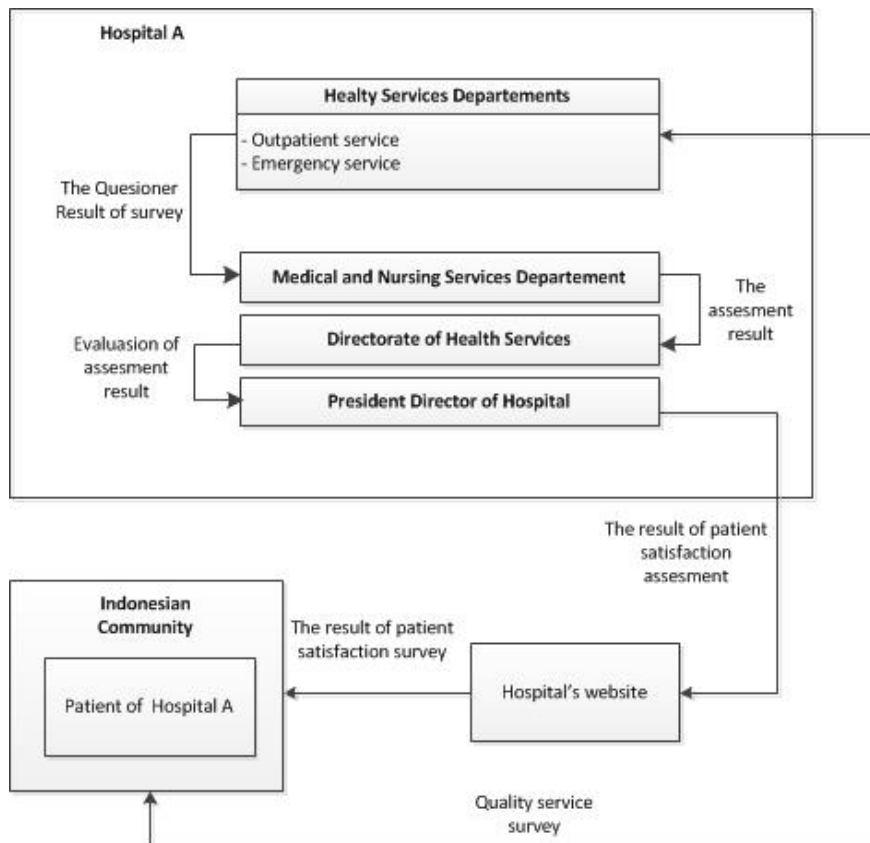
**Fig. 2. Indicators of community satisfaction index analysis.**

The indicators of Community Satisfaction Index for using in e-Service Quality of hospital can be seen as follows:

- i. Tangibility; quality of health service facilities in all of the departments such as facilities and infrastructure, medical equipment, as well as their medical and non-medical personnel.
- ii. Reliability; the health service department should have an ability to provide services that promised, such as the speed of the service process, the accuracy of the medical actions, and the appropriateness of price for the patient.
- iii. Responsiveness;
  - a. The accuracy of medical personnel in providing regular health services and emergency services.

- b. The quick handling of patient complaints related to medical and non-medical problems.
- c. The quick response from hospital and accuracy in handling patient complaints.
- iv. Assurance;
  - a. Competence; credibility, competence, and friendliness of medical and non-medical personnel in providing services to patients.
  - b. Credibility; honesty and responsibility for all department services so that patients can trust the department.
  - c. Courtesy; ethics of modesty, respect, and friendliness of the hospital human resources to patients while providing services.
  - d. Security;
- v. Empathy; feeling safe and no doubts about the services that the hospital provides to the patients.

Figure 3 shows the e-service quality of hospital model that applied in Hospital A. The patients from the hospital can use the e-service of Hospital and Health Services Departments online.



**Fig. 3. E-Service quality of hospital model.**

Figure 4 shows the functional design of the e-service quality of hospitals. There are five users in that system, namely the Vice President of the hospital, system administrator (Admin), the staff of the Service Department, director of Healthy Service Department, and patients. E-service quality connected to the Medical Record System of that hospital to keep the medical record of patients [16].

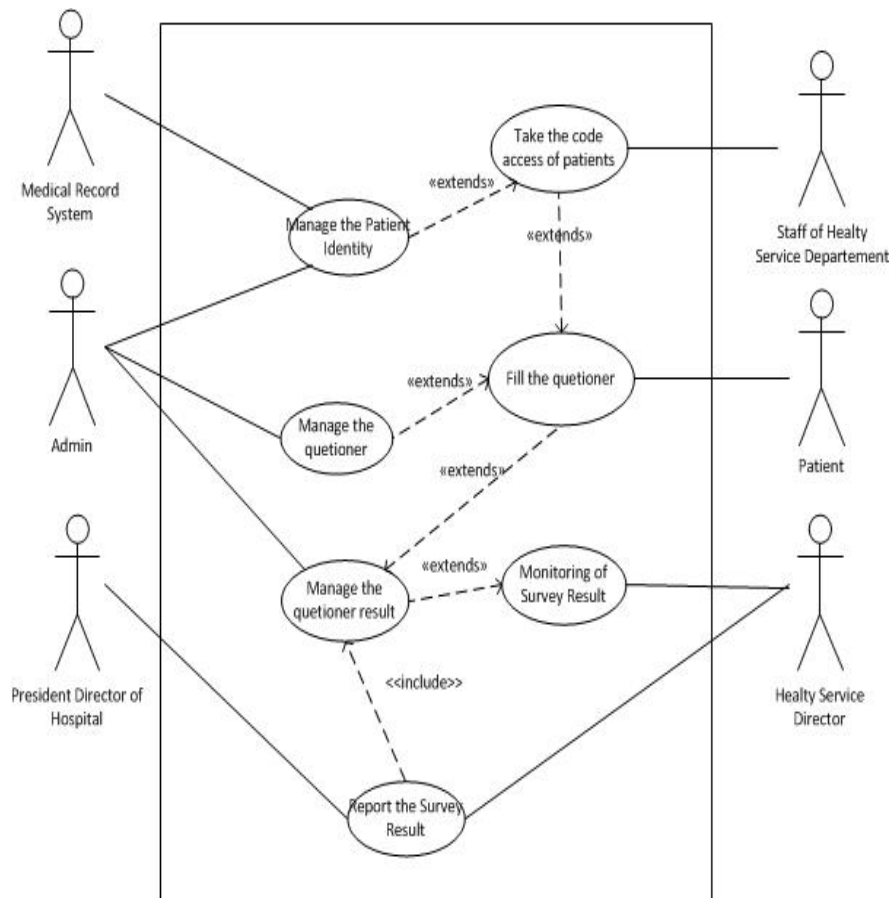


Fig. 4. Usecase of e-Service quality.

#### 4. Conclusion

Various types of hospitals in Indonesia can use the E-Service Quality of Hospital, such as general hospitals and special hospitals. The patient satisfaction indicators obtained from the result of alignment between five dimensions of quality service and 14 elements of the Community Satisfaction Index by the government.

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