

# The components of health service marketing influencing health service quality for priests

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## Abstract

The objectives of this research were to examine the components of health service marketing influencing health service quality for priests in the context of quantization and qualitative statistical analysis. The methodology used in the study included questionnaire and interview with the sample of 240 priest students from the Buddhist universities.

Research findings showed that the result of the causal correlation analysis had a positive relationship between the components of health service marketing and the health service quality (0.778, Cronbach's alpha 0.001). The most significant components of health service marketing were people, process, physical evidence, promotion (communication), place, product and service, and price (cost) respectively. Health service quality of the hospital comprised the responsiveness, reliability, assurance, empathy, and the tangibles.

**Keywords:** components of health service marketing, health service quality, priests

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## 1. Introduction

Marketing in the healthcare service has been increasingly accepted which hospitals can contribute as service strategic plan. Many public hospitals include hospitals which provide healthcare service for priests and have added service marketing strategy to create a competitive advantage in order to improve the quality and efficiency of patient care. This satisfies patients and build patients loyalty to the hospital.

Kotler, Kotler and Keller [1, 2, 3] stated that service marketing focus on more important tasks and is different from the general product marketing (4P's). Service marketing consists of product, price, place, promotion, people, physical evidence, and process. The application of service marketing concepts is an important tool to evaluate and determine the quality of medical services and a reinforced understanding of service quality [4] from SERVQUAL model [5, 6]. Service marketing is therefore an effective activity undertaken by hospitals. This is also becoming an increasingly significant contributor in supporting the quality of service and fulfilling a truly successful healthcare service for priests.

After reviewing the literature in this domain previous researches showed public hospitals in international were subject to the components of health service marketing and the health services quality were widely applied in service development and patient's satisfaction [7, 8]. In Thailand, most of previous research studies focused on the services marketing and service quality in private hospitals. There were a small number of researches studied in public hospitals

and medical healthcare. Evidently, there was no finding in any research studied on the correlation between the components of health service marketing and health service quality, especially in hospitals which provided healthcare service for priests [9, 10]. Moreover, the service marketing in hospitals that provided healthcare service for priests is the new paradigm shift from the dimensions of business organizations to the dimensions of the government or non-profit organizations. The researcher, therefore determines the research questions that "How should the components of health service marketing influence the service quality of hospital which provide healthcare service for priests?" and "How do they relate to each other?"

## 2. Research objectives

This research aims to 1) survey the components of health service marketing and health service quality for priests; 2) study the significance of the components of health service marketing and health service quality for priests; and 3) study the causal relationship of the components of health service marketing influencing health service quality for priests.

## 3. Pertinent variables

The components of health service marketing are an extended marketing mix and are an integral part of a health service blueprint design. This study applies the components of health service marketing from service marketing mix [1, 2, 3], which include product

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and service, price (cost), place, promotion (communication), people, physical evidence, and process.

Product and service: - The healthcare services which are being provided by the hospital are its product. The hospital product and service have a very powerful influence on patient satisfaction and loyalty [11]. Price (cost): - Conscience or opportunity cost is part of the cost of product and service ownership. The previous research has confirmed positive effect of cost free on attitude toward brand and patients decision making of hospital [12]. Place: - Distribution of healthcare service plays a crucial role. This focuses on the instrumentality of almost all who are involved in making services available to the ultimate users. In case of hospitals the location of hospitals plays a very importance role [13, 14]. Promotion (communication): - All the methods that hospitals use to let their patients know about their services such as print media, social Media, public relation etc [7]. People: - This includes all the different people involved in the service providing process which includes doctors, nurses, supporting staff etc. The earliest and the best way of having control on the quality of people will be by approving professionally sound doctors and other staff [15]. Physical evidence: - It is the environment in which the service is delivered with physical or tangible commodities and where the hospital and the patient interact. It plays an important role in healthcare services, as the core benefit a patient seeks is proper diagnosis and cure of the problem. Process: - The process of giving a service and the behavior of the person giving the service is most important for the satisfaction of the patient [9].

Health service quality has been defined as an assessment of how well a delivered service confirms to the patient's expectations. Hospitals often assess the service quality provided to their patient in order to improve their service, to quickly identify problems, and to better assess patient satisfaction. This study applies health service marketing from SERVQUAL model [5, 6]. The five dimensions or factors of health service quality are reliability, responsiveness, assurance, empathy, and tangibles.

Several studies investigated health service quality regarding patient's satisfactions of hospital. Reliability means ability to perform the promised service dependably and accurately [16]. Responsiveness means willingness to help patient and provide service. Assurance means knowledge and courtesy of hospital staffs and their ability to convey trust and confidence. Empathy means caring, individualized attention the hospital provides its patients [10, 17]. Tangible means appearance of physical facilities, equipment, personal, and communication materials [8].

#### 4. Research methodology

The research was conducted via mixed-methods. A qualitative study was conducted using the interview of director and head departments who were involved in health service marketing and health

service quality in a hospital which provides healthcare service for priests. The findings were used to formulate a questionnaire in quantitative research in which 240 priest students, who visited the hospitals (outpatient and inpatient departments) within 12 months (January 2015 - December 2015) from the Buddhist universities answered the questionnaire.

Instruments used in research were questionnaire for the priest students for 5 levels which had accuracy from 0.60 - 1.00. The questionnaire's reliability was 0.95 and data was collected from the questionnaire which was conducted from February till May 2016.

The average, standard deviation, percentage, confirmatory factor analysis and causal correlation analysis between the components of health service marketing and health service quality were used as statistic. The processed statistical program was also used to examine the discrepancy of the structural equation model hypothesis and the empirical evidences.

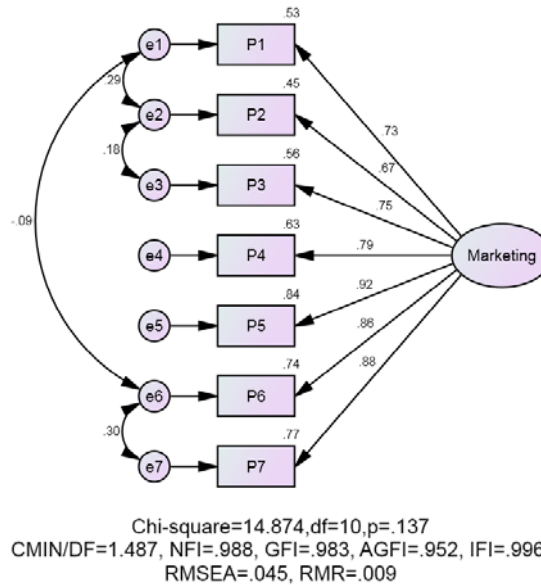
#### 5. Research result

According to director and head of department interview's analysis, the components of health service marketing were confirmed with seven components including the product and service, price (cost), place, promotion (communication), people, physical evidence, and process. In addition, health service quality was concluded with five factors comprising of reliability, responsiveness, assurance, empathy, and tangibles.

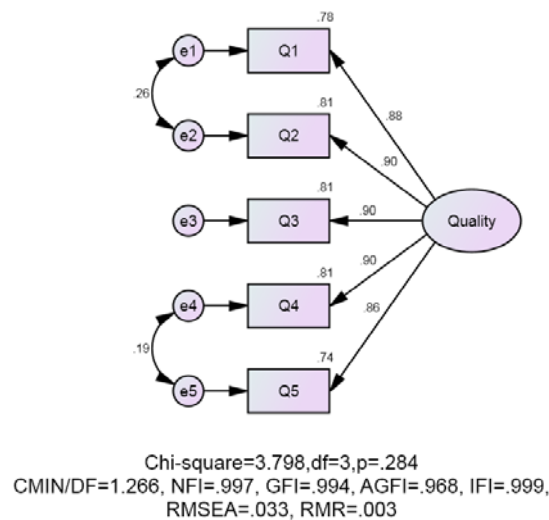
The research result found that the overall components of health service marketing in the most significant level included the place, price (cost), people, physical evidence, product and service, process, and the promotion (communication). The overall factors of health service quality were in the most significant level, including an assurance, tangibles, empathy, reliability, and the responsiveness.

The result of a confirmatory factor analysis disclosed that the components of health service marketing included people (P5), process (P7), physical evidence (P6), promotion (communication) (P4), place (P3), product and service (P1), and price (cost) (P2). The path co-efficiency was 0.92, 0.88, 0.86, 0.79, 0.75, 0.73 and 0.67 with the Chi-square ( $\chi^2$ ) = 14.874 or  $\chi^2/df = 14.874$ , Degree of freedom (df) = 10, probability level (p-value) = 0.137, Goodness of Fit Index (GFI) = 0.983, Adjusted Goodness of Fit Index (AGFI) = 0.952, and Root Mean Square Effort of Approximation (RMSEA) = 0.045. The measurement model was good fitted to the data. All indices exceed acceptable standards of model fit as shown in Figure 1.

The result of a confirmatory factor analysis of the health service quality comprised a responsiveness (Q2), assurance (Q4), empathy (Q3), reliability (Q1), and tangibles (Q5) with the path co-efficiency of 0.90, 0.90, 0.90, 0.88 and 0.86 with the Chi-square ( $\chi^2$ ) = 3.798 or  $\chi^2/df = 1.266$ , Degree of freedom (df) = 3,



**Figure 1** Measurement model for the components of health service marketing



**Figure 2** Measurement model for health service quality

and probability level (p-value) = 0.284, Goodness of Fit Index (GFI) = 0.994, Adjusted Goodness of Fit index (AGFI) = 0.968, and Root Mean Square Effort of Approximation (RMSEA) = 0.033. The measurement model was good fitted to the data. All indices exceed acceptable standards of model fit as shown in Figure 2.

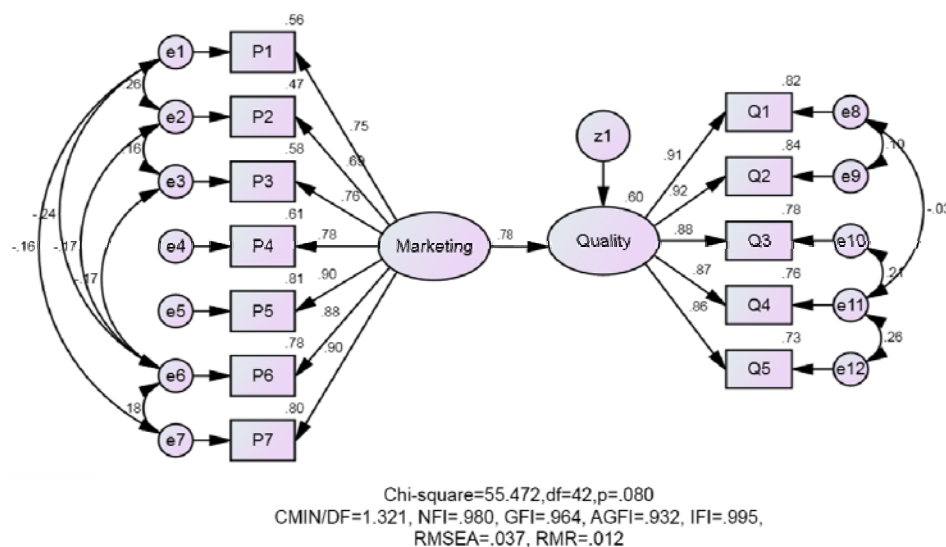
First the result of the causal correlation analysis between the components of health service marketing and health service quality was not a good fit, with the Chi-square ( $\chi^2$ ) = 132.454, Degree of freedom (df) = 53, p-value = 0.000, Goodness of Fit Index (GFI) = 0.909, Adjusted Goodness of Fit Index (AGFI) = 0.866, and Root Mean Square Effort of Approximation (RMSEA) = 0.079. After modified the hypothesis model and the empirical evidences, fit index indicated that the Chi-square ( $\chi^2$ ) = 55.472, Degree of freedom (df) = 42, p-value = 0.080, Goodness

of Fit Index (GFI) = 0.964, Adjusted Goodness of Fit Index (AGFI) = 0.932, and Root Mean Square Effort of Approximation (RMSEA) = 0.037. Therefore, this index gave an indication that the result of the causal correlation analysis had a positive relationship between the components of health service marketing and the health service quality as shown in Figure 3.

## 6. Discussion

### 6.1 The components of health service marketing

The study showed place, price (cost), people, physical evidence, product and service, process, and promotion (communication) were considered to be used for the parts of health service marketing at a more agreeable level.



**Figure 3** Measurement model of the sequent impact of the components of health service marketing on health service quality (after model modification)

Place refers to the hospital located near the community. The hospital is located in a convenient area. The hospital has an emergency channel for quick service. Moreover, the hospital has the fast forwarding service (referral system).

Price (cost) relates to providing free public social welfare. The service is worth the cost of travel. There is no extra charge for other treatments, and the service is worth the time spent.

People relates to the officers dressed appropriately with name tag on the outermost layer of clothing. The officers are friendly, kind, gentle and respect the right of patients. Professional doctors provide medical advice, diagnosis or treatment. The officers at outpatient department or inpatient department have the ability to provide the services, and nurses are always enthusiastic to serve.

Physical evidence refers to hospital map and signpost are clear and easy to understand. There is sufficient medical equipment for medical treatment. Hospital building, examination room or inpatient room are clean and tidy and have good air ventilation. Convenience facilities are provided within the hospital. In addition, place and environment in hospital are safe for patients and relatives.

Product and service are the health promotion services, the healthcare services, the disease prevention services, and the health rehabilitation services.

Process relates to the information provided about the steps of service that is queues are clear and easy to understand. Patients feel safe when they receive treatment. Follow-up appointments after treatment are made systematic. Patients are confident and have faith in the treatment process when they undergo medical care. The healthcare delivers service in order. The treatment meets the patient's expectation. Each medical service is quick and easy. The registration

system and queue management system are convenient, and the patient does not have to wait for too long.

Promotion (communication) relates to hospital marketing through various media. The healthcare guides are published on the website of hospital. The hospital sends the mobile medical unit for diagnosis and treatment. The hospital officers health advice to the patients on a regular basis, and the hospital provides education about self-care training.

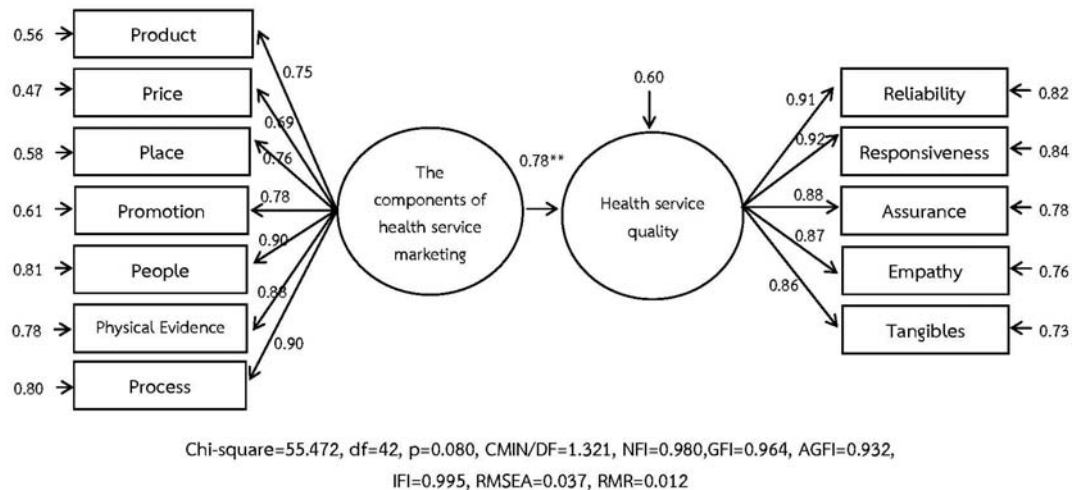
### 6.2 Health service quality of hospital

The study showed the priests were satisfied with assurance, tangibles, empathy, reliability, and responsiveness.

Assurance refers to patients confidence about personal information not being disclosed. The officers with health knowledge are willing to serve. Doctors have special training and skills needed for treatment. Patients are ensured that the medical service is handled correctly, and the officers have good interpersonal skill and are service-minded. However, the research of Herni Justiana Astuti and Keisuke Nagase [18] concluded that the patient satisfaction does not relate with relationship marketing and loyalty, even though the healthcare provider can increase patient satisfaction by demonstrating reliability, commitment and communication skill.

Tangibles refers to hospitals keeping the place and environment clean. There are clear signposts in hospital. Hospital has sufficient facilities. There are easy step-by-step service instructions, and hospital has adequate medical instruments.

Empathy refers to the officers whose intention is to provide best practice to patients. The officers who provide healthcare meet the need of patients. The officers care about the symptoms of illness, and the officers give service based on the urgency and problems.



**Figure 4** The structural equation model showed the components of health service marketing influencing health service quality for priests.

Reliability means hospitals provide the correct treatment service for the illness. The patients receive advice following the symptoms of illness. The medical treatment service concerns about the medication error prevention. Hospital provides medical treatment services as scheduled, and hospital continuously provides the comprehensive care.

Responsiveness relates to the staff who are ready and willing to serve. The services are provided in the queue order. Patients have an opportunity to ask the questions about the illness. Hospital provides convenient and timely service and also meets the needs and requirements.

According to the findings, the result of the causal correlation analysis between the components of health service marketing and the health service quality showed to gain an equation relation as  $Z$  (Health service quality of hospital) = 0.778  $Z$  (The components of health service marketing). Therefore, this equation stated that the result of the causal correlation analysis had a positive relationship between the components of health service marketing and the health service quality (0.778, Cronbach's alpha 0.001). The most significant in the components of health service marketing was people (factor loading 0.90), while the process (factor loading 0.90), physical evidence (factor loading 0.88), promotion (communication) (factor loading 0.78), place (factor loading 0.76), product and service (factor loading 0.75), and price (cost) (factor loading 0.69) respectively. Health service quality of the hospital comprised the responsiveness (factor loading 0.92), reliability (factor loading 0.91), assurance (factor loading 0.88), empathy (factor loading 0.87), and the tangibles (factor loading 0.86) as presented in Figure 4.

## 7. Conclusions

The objective of this study was to provide a guidance of managerial and operational strategy for head of hospital which provide healthcare service for priests to be used and applied with service marketing

strategies for each environment. This study indicates that health services marketing will directly affect health service quality of hospital. The effects of health service marketing on health service quality of hospital stated that health service marketing should constitute of three most important components; personnel, process and physical environment. If hospital has an applicable health service marketing, health service quality of hospital tend to move upward, especially the responsiveness, reliability, and assurance.

The guidelines for the development of hospital productivity and service quality are following:

7.1 To improve hospital officers to deliver good quality services, hospitals are required to provide technical and interactive skills training regularly, including the use of modern technological tools. Moreover, the interpersonal skills training are needed for all departments in the organization in order to focus on service excellence at every levels of the contact point.

7.2 Developing the additional services (value added), the hospital can optimize service processes by managing the processes with the use of technology that benefit the healthcare system. The information technology and the computing network can help these services such as new disease prevention services, the healthcare services, the health promotion services, and the health rehabilitation services which are convenient, fast, and accurate.

7.3 Besides taking care of the cleanliness and maintenance of the physical environment both inside and outside regularly, the hospital should focus on the development and improvement of facilities and infrastructure in order to support the digital knowledge and modern medical technology.

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