

# How Marketing Factors Affect the Decision of Foreign Patients in Selecting Private Hospitals in Bangkok, Thailand

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**Abstract :** The purpose of this research article was to (1) study demographic factors of foreign patients who received health service from private hospitals in Bangkok, Thailand, (2) to study the relationship between marketing factors and foreign patients' decision behavior in selecting private hospitals in Bangkok, Thailand. This study was a quantitative research study which utilized a questionnaire as a research instrument. The sample consisted of 420 foreign patients who had health care service at private hospitals in Bangkok, Thailand. Data was analyzed by a statistical package and presented in terms of frequency, percentage, mean, and standard deviation. Therefore, entrepreneurs of private hospitals in Bangkok, Thailand could exploit the outcomes of this study to help improve and/or develop their marketing plan to comply with their corporate goals so that they could better compete in the marketplace.

**Keywords :** Marketing factors, Decision, Foreign patients, Private hospitals.

## 1. INTRODUCTION

Thailand is the world's 51st-largest country. It is the 20th-most-populous country in the world, with around 66 million people. The capital and largest city is Bangkok, which is Thailand's political, commercial, industrial, and cultural hub <sup>(1)</sup>. Bangkok has a population of over 8 million, or 12.6 percent of the country's population <sup>(2)</sup>. Since 2010, the Thai government has developed several strategic development plans to create a competitive advantage for Bangkok. One of the famous projects has been launched by the Department of Industrial Promotion of Thailand and was officially announced in its journal that Bangkok has been promoted as a medical hub of Asia <sup>(3)</sup> and ever since, the hospital health care industry in Bangkok has become more highly competitive in both domestic and international markets. Regarding the competition in the country, during the year 2014-2015, there was a report about the purchasing power of Thai people that had been continually reduced and had a great impact on the income of the private hospitals as well. The total revenue of the industry grew at an average of 11.0 percent per year. When considered in breakdown revenue, the revenue of the private hospitals that had a high proportion of Thai patients had an income growth at an average of 7.0 percent per year while the private hospital that focused on capturing foreign patients had an income growth at an average of 11.7 percent per year. In addition, the revenue from foreign patients skyrocketed to 15.1 percent per year. Thus, as the statistics show, it reflected that foreign patients were a key market-driver of Thai private hospitals <sup>(4)</sup>. In addition, from the records of the National Statistical Office, in the year 2012, there were around 1.9 million foreign patients who received medical services from private hospitals in Bangkok.

In the international market, there were other countries in South East Asia that were considered major competitors, including Singapore and Malaysia. Each country held their own strengths and great potential

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in medical service in order to attract a new market valued not less than 50 thousand million US\$. In addition to the quality and standard of treatment care, each country has been recognized by foreign patients and found different market positioning. The shared-key strength of the region was the reputation of good value for money.

In Bangkok, the hospital service consists of private hospitals and public hospitals. A public hospital or government hospital is a hospital which is owned by a government and receives government funding. In some countries, this type of hospital provides medical care free of charge, the cost of which is covered by government reimbursement <sup>(5)</sup>. While, a private hospital is a hospital owned by a for-profit company or a non-profit organization and privately funded through payment for medical services by patients themselves, by insurers, Governments through national health insurance programs, or by foreign embassies <sup>(6)</sup>. In the year 2012, there were 98 private hospitals in Bangkok, 78 of them were general hospitals while 20 were specialized hospitals. Those private hospitals were different in size; the smallest ones had less than 11 beds while the largest had more than 250 beds <sup>(7)</sup>.

For the above circumstances, the competition is rising and in order to become a medical hub of Asia, entrepreneurs of private hospitals in Bangkok should improve and/or develop their marketing plans to comply with their corporate goals so that they could better compete in the marketplace. The researchers therefore conducted a descriptive research to study how marketing factors affect the decision of foreign patients in selecting private hospitals in Bangkok to obtain useful information on the development of the Thai private hospitals and that would benefit Thai health care system as a whole.

## 2. LITERATURE REVIEW

### Service

“A service is an act of performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product.” (Philip Kotler, 2011: 421-444).

**From the definition, there are 4 key characteristics of service which are :**

1. **Intangibility** : It is an important aspect of the service. Service cannot be seen, heard, smelt, felt or tasted before making a purchase (Armstrong and Kotler, 2009: 334-356), so sellers have to provide something different to ensure that buyers can make a purchase faster.
2. **Inseparability** : Production and consumption happen simultaneously and cannot be separated from the service provider.
3. **Variability** : The quality depending on the provider and on whether service takes place, when and how.
4. **Perish ability** : Service occurs shortly and cannot be stored or be sold later.

### Service Marketing Mix

McCarthy (1960), Luekveerawattana, (2016), referred to marketing mix as ‘4Ps’- product, price, place, and promotion. McCarthy’s four Ps model has dominated marketing thoughts, particularly in the goods marketing context (Gronroos, 1994; G.S. Kushwaha, S.R. Agrawal, 2015). For service industries, it was observed that the traditional marketing mix was inadequate because the original marketing mix was developed for manufacturing industries (Gitlow, 1978; Shamah, 2013; G.S. Kushwaha, S.R. Agrawal, 2015). Therefore, the marketing models and concepts have to be developed in the direction of the service sector (Gronroos, 1987; G.S. Kushwaha, S.R. Agrawal, 2015). Then, the marketing mix has extended beyond the 4Ps for marketing of services (Gronroos, 1983; G.S. Kushwaha, S.R. Agrawal, 2015). The three additional Ps are added to meet the marketing challenges posed by the characteristics of services such as people, physical evidence, and process. A number of marketing research studies supplements the relevance of each of the ‘7Ps’ of the services marketing mix (Berry and Parasuraman, 1991; Gronroos

and Helle, 2012; G.S. Kushwaha, S.R. Agrawal, 2015) <sup>(8)</sup>. The elements of the service marketing mix are product (service), price, place, integrated marketing communication, people, process, and physical evidence. A brief description of each element is described below;

Product (Service) refers to something that is offered to meet consumer’s demand.

Price refers to value for money to exchange for the needs and wants.

Place refers to the unit or the channels to present the product or service to consumers.

Integrated marketing communication (IMC) refers to an expansion of modern and traditional marketing strategies, to optimize the communication of a consistent message conveying the company’s brands to stakeholders. <sup>(9)</sup>

People refers to individuals who are involved in a service.

Process refers to a procedure or method of offering a service.

Physical Evidence refers to the environment in which the service is delivered and where the firm and customer interact, and any tangible components that facilitate performance or communication of the service (Booms and Bitner, 1981; Visser, 2016).

### 3. RESEARCH OBJECTIVES

To study demographic factors of foreign patients who received health service from private hospitals in Bangkok, Thailand to study the relationship between marketing factors and foreign patients’ decision behavior in selecting private hospitals in Bangkok, Thailand

### 4. RESEARCH FRAMEWORKS

In the process of developing a research framework for determining the relationship between marketing factors (independent variables) and decision of foreign patients in selecting private hospitals in Bangkok, Thailand (dependent variables). As shown in Figure 1.

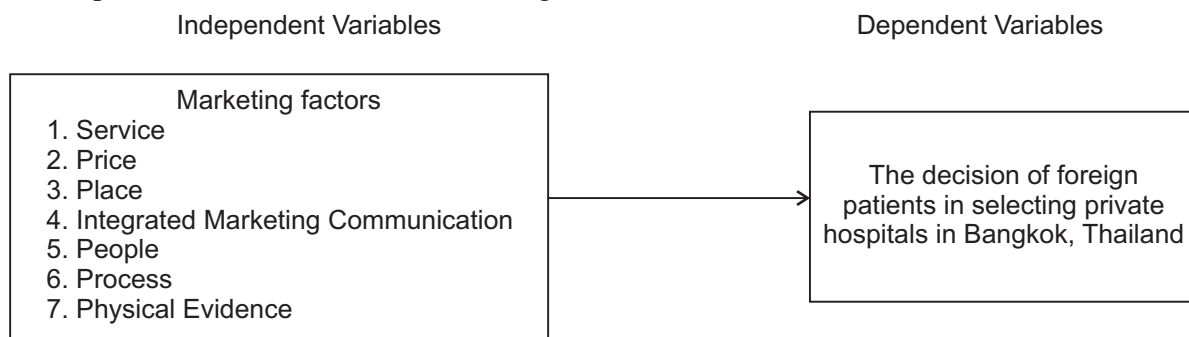


Figure 1: Research Frameworks

### 5. METHODOLOGY

#### 1. Population and Sampling procedure

The studied population was foreign patients who received health service from private hospitals in Bangkok, Thailand.

The studied sample group was foreign patients who received medical treatment from private hospitals that had a capacity of more than 100 beds and located in Bangkok, Thailand. Since the population was too large to identify in exact number, the researchers utilized the formula of W.G. Cochran and set the confidence level at 95 and the statistical significance level of 0.05 (8).

The sampling procedure was as follows; First, the data for this study was collected by cluster sampling method based on 6 administrative districts of Bangkok (9). Then, researchers applied the quota sampling methods that determined 70 samples for each district which was in total the sample size that would equal 420 foreign patients. Lastly, the convenience sampling was utilized.

## 2. Research Instrument

A questionnaire was used as a research instrument for this study. It was comprised of two main sections. The first section concentrated on generating a demographic profile of the respondents, including gender, age, marital status, nationality, education level, occupation, income per month, health care rights, purpose of stay in Bangkok, and period of stay in Bangkok. The second section focused on marketing factors. The questions were close-ended and utilized a rating scale method.

## 3. Data Collection

The data was distributed and collected during January-June 2016 using the structured questionnaire. By the time of distributing the questionnaire, the researchers prepared a brief explanation of the study for the researcher team. The questionnaire was hand-delivered by the researchers and the teams and waited until the respondents answered all the questions. In order to minimize possible bias, it was communicated to participants that their opinions were voluntary and anonymous and they were encouraged to state their own personal opinion as truthfully as possible while the data would strictly used in academic purposes only. As a result, 420 completed questionnaires were retained and used for subsequent data analysis.

## 4. Data Analysis and interpretation

The authors determined the class interval in order to apply for an interpretation using the following formula (14)

$$\begin{aligned} \text{Class interval} &= \frac{\text{Highest Value} - \text{Lowest Value}}{\text{Number of classes}} \\ &= \frac{5 - 1}{5} \\ &= 0.8 \end{aligned}$$

**Table 1**

<i>Class interval</i>	<i>Interpretation</i>
4.21 – 5.00	Highest level of opinion
3.41 – 4.20	High level of opinion
2.61 – 3.40	Moderate level of opinion
2.61 – 3.40	Low level of opinion
1.00 – 1.80	Lowest level of opinion

## 6. FINDINGS

After the data obtained from 420 foreign patients that received health care service in Bangkok, The findings were separated into 2 sections according to the questionnaire.

### Section I: Demographic factors

The researcher analyzed the demographic factors of respondents using descriptive statistics which were frequency and percentage to describe personal data of respondents including gender, age, marital status, nationality, education level, occupation, income per month, health care rights, purpose of stay in Bangkok, and period of stay in Bangkok. The details are as following:

The majority of 55% of the respondents were male, aged between 41-50 years old (33%) and above 50 years old (22%). Most of the respondents were single (59%). Regarding nationality, 28% were Chinese, 18% were American, and 15% were Myanmar. The majority had an average income of more than 30,001

Baht per month (42%). Most of the respondents were employees of organizations (67%). With regard to educational background, 45% of the respondents were high school diploma holders, while 29% attained a Bachelor degree. 23% had no health care rights, 21% had benefits package from their organization. The main purposes of stay in Bangkok were medical tourism (34%), work (19%), and study (11%). Lastly, 37% had stayed in Bangkok less than 1 year while 29% has stayed for 1-5 years.

## Section II: Marketing factors

The researcher applied a rating scale method, the Likert's scale, and then used mean and standard deviation to measure opinion of foreign patients on how marketing factors affect their decision in selecting private hospitals in Bangkok, Thailand. The details of seven dimensions of marketing factors were described as follows.

**Table 2**  
**Service**

<i>Service</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Expertise in medical and health care service	4.53	0.67	Highest
Hospital reputation	4.49	0.71	Highest
Excellence service	4.36	0.69	Highest
Hospital accreditation	4.23	0.78	Highest
Advanced technology of medical treatment	3.83	0.85	High
Average Score	4.29	0.74	Highest

Table 2, found that the overall opinion of foreign patients towards the service dimension was at high level. When considered in detail, foreign patients reacted to an expertise in medical and health care service for the highest average score and at the highest level while foreign patients considered the technological advancement of medical treatment at the least average score but still categorized it as high level.

**Table 3**  
**Price**

<i>Price</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Reasonable price compared to the quality of medical treatment received	3.93	0.82	High
Reasonable price compared to the same medical treatment in other countries	3.84	0.86	High
Reasonable price compared to the same medical treatment in other private hospitals in Bangkok	3.74	0.89	High
Pricing was clear and transparent	3.68	0.88	High
Subsidization/health care insurance/health care rights that affect to price	3.60	0.91	High
Average Score	3.76	0.87	High

Table 3, found that the overall opinion of foreign patients towards the pricing dimension was at a high level. When considered in detail, foreign patients reacted to a reasonable price compared to the quality of medical treatment received for the highest average score and at the high level while foreign patients considered the price subsidization and the possession of health care insurance and/or health care rights at the least average score but still categorized in a high level.

**Table 4**  
**Place**

<i>Place</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Location	3.88	0.76	High
Accessible by public transportation	3.72	0.98	High
Easy access	3.68	0.90	High
Accommodation nearby	3.35	1.05	Moderate
Adequate parking lot	3.22	1.16	Moderate
Average Score	3.57	0.97	High

Table 4, found that the overall opinion of foreign patients towards the place dimension was at high level. When considered in detail, foreign patients reacted to a location for the highest average score and at the highest level while foreign patients considered an adequate parking lot at the least average score but still categorized in a moderate level.

**Table 5**  
**Integrated Marketing Communication**

<i>Integrated Marketing Communication</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Promotional activities <i>i.e.</i> discount/redemption/giveaway/premium	3.88	0.86	High
Advertising and public relations	3.69	1.02	High
Accessible contact points <i>i.e.</i> social media, website, e-mail, telephone	3.65	0.93	High
Customer Relations	3.56	0.95	High
Corporate Social Responsibility	3.50	0.97	High
Average Score	3.66	0.95	High

Table 5, found that the overall opinion of foreign patients towards the integrated marketing communication dimension was at a high level. When considered in detail, foreign patients reacted to promotional activities such as discount/redemption/giveaways/premiums for the highest average score and at the high level while foreign patients considered corporate social responsibility at the least average score but still categorized in a high level.

**Table 6**  
**People**

<i>People</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Excellent services	4.44	0.67	Highest
Professional skill of medical staffs	4.24	0.81	Highest
Provided adequate and appropriate explanations about medical issues to patient	4.22	0.83	Highest
Language proficiency	4.17	0.83	High
Complaint management	4.00	0.87	High
Average Score	4.21	0.80	Highest

Table 6, found that the overall opinion of foreign patients towards the people dimension was at a high level. When considered in detail, foreign patients reacted to excellent services for the highest average score and at high level while foreign patients considered complaint management at the least average score but still categorized in a high level.

**Table 7**  
**Process**

<i>Process</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Agility and timely	3.50	0.92	High
Coordination between function	3.40	1.05	Moderate
Less complex	3.32	1.21	Moderate
Appropriate service procedure	3.21	1.77	Moderate
Readiness for emergency case	3.03	1.89	Moderate
Average Score	3.29	1.37	Moderate

Table 7, found that the overall opinion of foreign patients towards the process dimension was at a high level. When considered in detail, foreign patients reacted to agility and timely for the highest average score and at high level while foreign patients considered readiness for emergency case at the least average score but still categorized in a moderate level.

**Table 8**  
**Physical Evidence**

<i>Physical Evidence</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Hygiene	4.21	0.76	Highest
Advancement and readiness of medical equipment	3.44	0.82	High
Adequate facilities	3.20	0.78	Moderate
Foreign language signs and symbols	3.11	1.08	Moderate
Variety of food and beverage provided in hospital	3.01	1.26	Moderate
Average Score	3.39	0.94	Moderate

Table 8, found that the overall opinion of foreign patients towards the physical evidence dimension was at a high level. When considered in detail, foreign patients reacted to hygiene for the highest average score and at the highest level while foreign patients considered variety of food and beverage provided in hospital at the least average score but still categorized in a moderate level.

**Table 9**  
**Summary of marketing mix factors**

<i>Marketing Mix Factors</i>	<i>Mean</i>	<i>S.D.</i>	<i>Level of opinion</i>
Service	4.29	0.74	Highest
Price	3.76	0.87	High
Place	3.57	0.97	High
Integrated Marketing Communication	3.66	0.95	High
People	4.21	0.80	Highest
Process	3.29	1.37	Moderate
Physical evidence	3.39	0.94	Moderate
Average Score	3.74	0.95	High

In summary, as shown in Table 9 above, the overall opinion of foreign patients towards all 7 marketing mix factors was at a high level. When considered in detail; 2 marketing dimension which were the service and people factors had highest level of importance, 3 marketing dimensions which were the price, place, and integrated marketing communication factors had the high level of importance, and 2 marketing dimensions which were the process and physical evidence factors had the moderate level of importance.

**Table 10**  
**Multiple regression analysis**

<i>X</i>	<i>B</i>	$\beta$	<i>t</i>	<i>sig</i>
Constant	1.629		11.193	0.000
Service (X1)	0.358	0.384	7.462	0.000
Price (X2)	0.178	0.262	4.567	0.000
Place (X3)	0.116	0.101	1.850	0.065
Integrated Marketing Communication (X4)	0.088	0.174	3.114	0.002
People (X5)	0.158	0.246	0.398	0.000
Process (X6)	0.034	0.050	0.799	0.425
Physical Evidence (X7)	0.004	0.007	0.150	0.889
$R^2 = 0.527$ Adjust $R^2 = 0.520$ $P < 0.05$ $F = 70.833$				

The authors then tested for multiple regression analysis which table 10 illustrated that the 7 variables of marketing mix had a positive relationship to the decision behavior of foreign patients in selecting private hospital in Bangkok, Thailand. When combining the best variables of this set it could be inferred that marketing mix factors had a positive effect on the decision behavior of foreign patients in selecting private hospital in Bangkok, Thailand at 53.70 percent at the statistical significance level of 0.05. The degree of importance of each factor could be listed as follows; service ( $\beta = 0.384$ ), price ( $\beta = 0.262$ ), people ( $\beta = 0.246$ ), integrated marketing communication ( $\beta = 0.174$ ), place ( $\beta = 0.101$ ), process ( $\beta = 0.050$ ) and physical evidence ( $\beta = 0.007$ ).

## 7. DISCUSSION AND CONCLUSION

The findings of this study demonstrated that the overall marketing mix factors had a positive effect on the decision behavior of foreign patients in selecting private hospitals in Bangkok, Thailand. The highest importance marketing factor was the service dimension and the least was physical evidence. It complied with the study of Sasiwimon Ngamjarus (2012)<sup>(10)</sup> who noted that service factor was the most significant factor while physical evidence was the slightest important factor that affected the decision of receiving the heart disease treatment in Thailand for European patients. When considered in detail of service factor, foreign patients reacted to an expertise in medical and health care service for the highest average score which was agreed to the study of Noparath Phoomivuthisarn (2011)<sup>(11)</sup> who studied about patient's expectations and satisfactions toward medical school of public hospital in Bangkok.

## 8. SUGGESTIONS

The entrepreneurs of private hospitals in Bangkok could exploit the outcomes of this study and adjust to their marketing plans. The suggestions include;

1. Reinforce the strengths; private hospitals in Bangkok should strengthen their strong points. For example, according to the study, the highest score of the service dimension was the expertise in medical and health care service. Thus, the private hospitals should consistently update new knowledge and deepen the ones that they are already good at.



2. Improve the weaknesses; on the other hand, the entrepreneurs should focus on improving their weak points. For example, according to the study, the least score of the physical evidence dimension was the variety of food and beverage provided in hospital. Thus, the private hospitals should extend their international food and beverage lines such as Americans satisfied with the taste and variety but there should be cleanliness standards for food distribution <sup>(12)</sup> as well as the entrepreneurs should take a consideration to serve more special food for some religions or ethnicities.

## 9. ACKNOWLEDGMENT

The authors would like to thank the Research and Development Institute, College of Innovation and Management, Suan Sunandha Rajabhat University, Bangkok, Thailand for financial support.

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