Infection Diseases Section Original Article

Preparation and Designing a Checklist for Health Care Marketing Mix, with Medical **Tourism Approach**

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Abstract

Introduction: Increasing pressure on available funds in health care section 1. Student Research Committee, especially hospitals, enhances the need of analyzing different strategies in economic terms. One of the solutions for the optimal use of financial resources and potentials in hospitals and health care centers is using elements of the marketing mix. In this way we could make the best use of the resources and cause a return on investment and also generate income.

Methods: This is a cross-sectional and qualitative study. To prepare checklists, author used previous studies in marketing by referring to relevant web sites and designed the first draft. In next step, Delphi's technique was used for validity check; the checklist was sent to health care management specialists who had studied in medical tourist fields or those who lived in cities active in this field.

Results: the final checklist included 8 aspects (mixes) and 79 indexes in which Product Mix had 11 indexes, Place Mix had 3 indexes, Promotion Mix had 13 indexes, Price Mix had 9 indexes, Personnel Mix had 12 indexes, Promotion Mix had 6 indexes, Physical attraction Mix had 19 indexes and Physician Mix had 6 indexes.

Conclusion: this instrument could be used in various studies that could help asses' health care units state specially hospitals so that alternatives could be considered for improvable points and make maximum use of the potentials.

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Introduction

According to the WHO report, health and medical costs share was about 6 % of Iran's Gross Domestic Product in 2011[1]. Health centers are facing a future in which costs will be considered as the first issue[2]. Hospitals are the most important units that offer medical and health care services, which means making new hospitals will lead to promotion of health, Prevention of diseases and access to treatment and rehabilitation services. On the other hand, due to development of sophisticated technology and equipment and the use of widely different specialties, building new hospitals would be very costly[3]. According to

WHO's report, hospital expenses include about one half of all health costs in the third world countries. Hospitals share in governmental current expenses in health section is between 60-80 % [4]. Increasing pressure on available financial resources of health care units specially hospitals increases the necessity of analyzing different economical strategies[2].

Health care industry is witnessing a worldwide competition as well. Today, the number of patients travelling from developed countries to developing countries seeking medical care is increasing. These patients are not rich, but they demand medical care of high quality and low cost.

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Estimations are different so that McKinsey estimates the Revenue from medical tourism in 2012 will reach 100 billion dollars[5]. Based on WHO statistics, 50 billion dollars are spent for treatment in America and European countries every year, which could have an impressive impact on Medical tourism economy of Asian countries. Meanwhile in 2004, 11000 patients from other countries were admitted to Iran's hospitals and these statistics were raised to 17500 in 2005[6]. One of the ways to attract medical tourists and avoid wasting financial resources is using the elements of the marketing mix so they could make the best use of these resources and generate income. The concept of the marketing mix was explained in 1964 by Borden; he took his idea from Kalitoon, who defined marketing manager as decision maker and an artist combining elements of 4[7]. Marketing is neither a science nor an art; marketing is the process for identifying, anticipation and supplying customer's needs in a profiting manner, which follows the tendency of the customers. Marketing is the idea of a Set of controllable variables available to marketing management which could be used to influence the customers[8]. Elements of marketing mix are a set of manageable equipments and elements that organizations and companies form their marketing strategy by incorporating them [9]. Darling and Lipson divided these mix variables in to 4 levels: product mix, sale mix, communication mix and promotion mix. Bulte and Waterschoot defined the mix, a combination of useful elements to respond to market and named product, price, promotion and communication as Mix variables. Bulte and Waterschoot and McCarthy divided elements of marketing mix in to 4 decision making variables of Product, Price, Product Progression and Promotion channels Progression (4P)[7]. Therefore when product marketing strategies are discussed, marketing usually considers the four main factors of: product, price, place and advertisement, but the matter of services that includes Customer participation in the production and the importance of time, requires existence of other critical factors. To reach this challenge, integrated management model of service is used which draws the attention of service organizations managers to 8 decision making variables. Lovelock and Wright liken each of these 8 P's to paddles of a rowboat which moves with the

help of 8 rowers[10]. McCarthy stated in 1971 that creating marketing mix is an integral part in the selection of the target market and all these factors should be used in the same time For the Coordination of marketing strategy so it could be successful[11].

Many researchers have expressed in their studies that the four factors of price, place, product and promotion are elements of marketing mix[10, 12-14]. Bidokhti (2010) has added some factors such as physical evidence, planning and individuals to these elements[15].

According to the above, preparing a marketing mix checklist for medical care seems essential so that officials would assess their institutions using this checklist and avoid a waste of resources and finally increase the revenue of the institutions.

Methods

The present study is cross-sectional and qualitative performed in 2012 to create a checklist for elements of medical care marketing mix. It is a practical study that could be used by policy makers in health sector and university officials.

For this matter, Aspects of the marketing according to the past studies including product, price, place and promotion were chosen as elements of marketing mix. To design the checklist, author used passed studies in the field of marketing. To reach studies performed in Iran author referred to www.magiran.com, www.SID.ir, www.iranmedex.ir, www.irandoc.ac.ir, and for studies in other countries he referred to www.pubmed.com, www.proqust.com, www.sciencedirect.com and www.emeraldinsight.com. After studying various researches, other aspects such as employees, processes and physical attractiveness were added and Indicators for each aspect were determined. Then the initial checklist was designed with 7 aspects (Mixes) and 70 indicators having 2 ranges of answers: Yes or No. Aspects and indexes were as followed: Product Mix with 11 indicators, Place Mix with 9, Promotion Mix with 12, Price Mix with 9, People Mix with 12, Process Mix with 6 and Physical attraction Mix with 11indicators. In the next step, for validity check, Delphi's technique was used; thus the checklist was sent to health service management professionals that had studied and researched in medical tourism, or

were resident in cities active in the field of tourism, 15 of which replied. Their views were summarized and returned to them for the final assessment. This was continued till an agreement was reached by the experts. In the end Physician Mix was added to the aspects and the range of answers was changed to: Yes, No or to some extent.

Results

After applying the opinions of experts, the final checklist contained 8 aspects (Mixes) and 79 indexes: Product mix with 11 indicators, Place Mix with 3, Promotion Mix with 13, Price Mix with 9, People Mix with 12, Process Mix with 6, Physical attraction Mix with 19 and Physician Mix with 6 indicators. (In table 1, aspects and indexes are shown)

Table 1. Health Care Marketing Checklist

	Product Mix	
1	At this hospital, Variety of services are offered to the patients	
2	At this hospital, distinctive services in compare to other hospitals are offered.	
_	At this hospital, new services are designed for the patients.	
3		
4	At this hospital, new services are offered.	
5	At this hospital, post discharge services are offered.	
6	At this hospital, services are offered with the quality of higher than expected.	
7	At this hospital, consulting services are offered.	
8	At this hospital, services end in the first visit.	
9	At this hospital, Maximum respond to patient needs are given in the first visit	
10	At this hospital, preventive services are offered.	
11	At this hospital, proper diagnostic services are offered.	
Place Mix		
1	This hospital is located near the town.	
2	This hospital is not located in a crowded and noisy place.	
3	This hospital is easily accessible.	
Promotion Mix		
1	This hospital posts brochures and mails to the people.	
2	This hospital has an up dated website.	
3	This hospital uses ceremonies to introduce its capabilities.	
4	This hospital offers medical consultation phone services.	
5	This hospital provides patient experience and feedback of results.	
6	This hospital uses information tables in the hospital setting.	
7	This hospital uses animation for information.	
8	This hospital uses information banners.	
9	Representatives of this hospital are present in crowded city health centers and clinics.	
10	This hospital offers its performance as periodic reports to the public.	
11	This hospital uses television to advertise and inform people	
12	This hospital provides poor stratum of society with gifts and privileges.	
13	This hospital is creative in informing people.	
Price Mix		
1	This hospital has contracts with various basic and supplemental health insurances.	
2	At this hospital, financial information is presented clearly to the patient.	
3	At this hospital, bills are presented to the patients in a timely manner.	
4	At this hospital, discount on fees are offered to the patients.	
5	At this hospital, at certain seasons of the year special discounts are offered.	
6	At this hospital, some of the services are free.	
7	At this hospital, the patient is introduced to relevant department to obtain financial facilities.	
8	At this hospital, service fees are lower in comparison with other hospitals	
9	At this hospital, fees are charged based on customer's income.	

	Personnel Mix	
1	In these hospitals services, there are enough staffs.	
2	At this hospital, staffs respond to patients questions timely.	
3	At this hospital, staffs value patients' needs, feelings and emotions.	
4	At this hospital, staffs train communication skills.	
5	At this hospital, staffs appearances are uniform.	
6	At this hospital, staffs have spirit of criticism.	
7	At this hospital, staffs have the spirit of hospitality.	
8	At this hospital, staffs treat patients with openness.	
9	At this hospital, there are staffs with sufficient skills to provide services.	
10	At this hospital, there are staffs with appropriate knowledge and expertise to provide services.	
11	At this hospital, managers have communications with patients.	
12	This hospital's staffs have personal commitments.	
Process Mix		
1	At this hospital, promoting systems for service offering processes exist.	
2	This hospital responds to patients complaints.	
3	At this hospital, details of the offered services are explained to the patients.	
4	At this hospital, pamphlets, manuals and signs are used.	
5	At this hospital, patients are asked to vote through phone about the services delivery.	
6	At this hospital, network system and HIS are used.	
	Physical Attraction Mix	
1	In this hospital, inner space, wards facades and interior design has taken into consideration.	
2	In this hospital, outer space and facade has taken into consideration.	
3	In this hospital, there are parking lots for personnel and patients.	
4	In this hospital, Admission is possible through phone.	
5	In this hospital, Admission is possible via website.	
6	This hospital has contracts with private facilities in order to complete patients' treatment at home.	
7	In this hospital, patient transportation system in and out of hospital exists. In this hospital, some ambulatory care is possible without the presence of the patient.	
8	In this hospital, some amountarry care is possible without the presence of the patient. In this hospital, the combination and variety of colors are used.	
9	In this hospital, the combination and variety of colors are used. In this hospital, air conditioning and pleasant smells are used.	
11	In this hospital, an conditioning and pleasant shiens are used. In this hospital, recreational and convenient facilities for the patients and their relatives exist.	
12	In this hospital, optional food menu for the patients exist.	
13	In this hospital, optional food ment for the patients exist. In this hospital, an appropriate lighting system is used.	
14	In this hospital, an internal magazine is published.	
15	In the waiting room of the hospital, calm music is played.	
16	In the waiting room of the hospital, TV monitors exist.	
17	In the waiting room of the hospital, updated magazines and newspapers exist.	
18	In this hospital, interurban public phone exists.	
19	In this hospital, public phones to outside urban exist.	
Physician Mix		
1	There are sufficient physicians at this hospital.	
2	At this hospital, physicians deal with patients with openness.	
3	At this hospital, physicians with appropriate skills exist.	
4	At this hospital, physicians with appropriate knowledge and expertise exist	
5	At this hospital, famous physicians with good reputations exist.	
6	At this hospital, physicians have decent appearances and uniforms.	
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Discussion

Some of the indicators used in Product Mix were continuation of treatment, quality of services and variety of services. It was shown in many studies that Continuation of treatment, quality of services, existence of after sale services, diversified services and development of diversified services packages to attract patients are of importance [16-19].

For Place Mix, indicators such as Close distance to the city and easy access to the hospital and etc were set. Researchers showed that hospital's location[20] and customers' ease of access to services are very important in attracting patients[17]. It is also possible that the Lack of easy access to the service providing center and its long distance, would lead to increased costs and lack of customer incentives[21].

In Promotion Mix were also several indicators considered: sending letters and brochures to public, having an updated website, medical advice phone services, using animation and banners and etc. Tabibi and etc has expressed in his study in 2011 that advertisement is considered of great importance in attracting patients[22]. Another author showed that posters at the entrance and exit doors can be helpful in attracting patients[23]. Afshani showed in his studies that one of the major weaknesses of Iran's medical tourism industry is the lack of proper and professional information system, specially existing gaps in public relations electronics in Iran's hospitals, that leads to lack of awareness and willingness of national and international tourists[24].

In Price Mix, discounts and cheap prices have been mentioned, as Jabbari (2008) has mentioned price as the first motivational factor for most patients. The high cost of medical care in most developed countries have caused people to seek cheaper treatments in other countries which are the less developed countries from an economic perspective[25]. Another study shows that patients seek high quality medical care at affordable prices[5].

One of the indexes of the Staff and Physicians is their academic qualifications. A study explains that Proper training and qualification of personnel can support the medical care centers in providing appropriate medical services[26].

One of the indexes of Promotion Mix is patient and his family's awareness of the details of his treatment method. Various studies have emphasized that patient and his family, have the right to be informed of the treatment and care method and participate actively in this process, especially they should be fully aware of different consequences of the treatment[27-29].

A study about Physical attraction Mix showed that reasons for the low standard of facilities are items such as old hospital buildings and Lack of staff awareness of hygiene standards in hospitals[30].

Conclusion

Health institutions, especially hospitals can do a lot more use of this Check List, especially as regards that Iran economy is only dependent on crude oil and to escape of this dependence it should find a solution. These institutions can use this check list for attracting medical tourists and thereby acquire large incomes. Also by using this check List, health institutions and hospitals can recognize their strengths and opportunities as well as the Improvable points in different services' fields like medical tourism and find a remedy for their improvable points for maximum use of their potential.

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