

Full Length Research Paper

7Ps in corporate hospitals – Administrators' perspective

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The prime objective of the paper is to study 7Ps - Product, Price, Place, Promotion, People, Physical Evidence and Process - in selected corporate hospitals in India which is very pivotal in strengthening the effectiveness of a hospital. It is needless to say how important service sector is in the national economy. In India, more than 50% of the GDP is now accounted for by the service sector. Though this sector has gaining prominence in terms of its dominant role at the national level, much thought has not yet been given by academics in terms of introducing the marketing strategies towards improving the effectiveness and efficiency of the hospital. It is gratifying to note that there has been phenomenal growth in hospital services in India. There is multifold increase in the number of hospitals, doctors, nursing and paramedical staff. Recognizing the importance of this service, corporate sector is investing huge amount of money and so it has become vital to think in terms of effective utilization, with a view to provide effective service to the clientele and to give maximum returns on investment to the share holders. In this new environment, age old methods may not yield handsome returns. Application of service would pave avenues in rationalizing and standardizing the services. Marketing has become a buzz word to the service providers in present day hospitals. Hence, an attempt has been made in this article to study 7Ps in sample corporate hospitals. For this purpose, administrators' perceptions were elicited and analyzed with the help of relevant statistical tools like Means, Standard Deviation and ANOVA to know variations in the perceptions of the respondents. At the end, certain suggestions were given to the policy makers of the hospital. It is sure that if they follow the given suggestions one can overcome the problems of these hospitals to a great extent.

Key words: Hospital marketing, product mix, service brand, Physician – patient relationship, core services, auxiliary services, distribution channels, advertising, promotional aids, physical setting.

INTRODUCTION

Marketing is a function by which marketer plans, promotes and delivers goods and services to the customers. In services marketing the providers are supposed to influence and satisfy the users. When people buy services offered by a service provider in true sense, they buy the time, knowledge, skill or resources. Marketing the service means marketing something intangible. It is like marketing a promise. The meaning of service marketing

holds good in the case of hospitals also. The importance of marketing has grown in hospitals. In present day context, a hospital is a multi disciplinary super speciality medical centre with international standards. In a hospital, application of marketing principles becomes essential for their successful functioning. It makes possible a fine fusion between user's and provider's interests. The users expect world class services and the providers naturally

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want reasonable return. Hence, the corporate hospitals, over last two decades have developed a marketing culture in their set up which has enabled them to scale new heights in their ventures. As a matter of fact, in advanced countries, marketing has taken deep roots whereas in developing countries the need is being felt now. But still, there is inbuilt tendency to think that services will be sold out automatically, wards in a hospital will overflow if a doctor has a degree and money will flow if equipment is bought. Now also there is opposition from doctor administrators to the marketing concept. But for optimizing the cost of services, for expanding the scale of operations, to increase the health consciousness, to change the attitudes of service providers, to increase the financial soundness of the hospitals and to reduce communication gap between providers and users, marketing is an essential tool.

It is predicted that the first decade of the twenty first century will be the decade of the consumer in health care and ample evidence supports this assertion. "consumer-driven health care" is one of the latest buzzwords in the field and a "consumer choice" environment is emerging in healthcare organizations. They are required to cater to the needs and wants of a more demanding set of customers. Regardless of other trends developing in healthcare, the industry will continue to be market oriented. Marketing process consists of hundreds of variables or ingredients which involve marketing planning, marketing decision making and formulation of marketing mix strategies. All these can be conventionally classified into seven major areas namely product/service, price, place, promotion, people, physical evidence and process. The product element of the hospitals includes diagnosis, treatment provided, the education and training provided to nursing and medical students. Services like facilities to attendants, ambulance, and pharmacy services etc., augment the core service. The pricing of services should take into consideration the operational costs and the paying ability of the patient, apart from the value provided to the customer. People play a very important role in marketing of hospital services. Processes add value to customer and also improve the efficiency of the operations of the hospitals. Physical evidence can be provided using a good layout and maintaining hygiene. Supplementary services also help in providing physical evidence to customers.

Objectives of the study

Specific objectives of this research are:

1. To study 7 Ps - Product, Price, Place, Promotion, People, Physical Evidence and Process- in two corporate hospitals.
2. To compare the perceptions of administrators and doctors towards the 7Ps of marketing process.

3. To suggest suitable measures for increased effectiveness of hospital services in general and the selected hospitals in particular.

Hypotheses

1. The marketing processes of two selected hospitals are indistinguishable.
2. The perceptions of the administrators and doctors in both the hospitals are indistinguishable with respect to the Product/Service, Price, Place, Promotion, People, Physical Evidence and Process.

REVIEW OF RELATED LITERATURE

The literature related to the product is an article, titled *New service development: From Panoramas to Precision* by Anne et al. (2007). Wilson argues that a panoramic, or holistic, approach to new service development and a high level of precision at the micro level will combine to provide a more successful service design and new service development process. The article, *Developing New Services for Hospitals: A Suggested Model* written by Michael (1987) proposes that hospitals should facilitate market-driven services. The article, *Is product-line management appropriate for your health care activity?* by Naidu et al. (1993) examines the result of the study on product-line management (PLM) as management tool on health care industry. The article, *Product line management in hospitals; an exploratory study of managing change* by Burger et al. (1991) presents an abstract of product line management in hospitals. According to this article product line management is a system in which one manager is responsible for all aspects of marketing and delivery of one particular product or service bundle. Literature review on Price mix is given below. An article, *Case mix specialization in the market for hospital services* by Dean and Christopher (1985) says that hospitals may be able to reduce their costs by limiting the breadth of services they provide. The article, *Is there a link between hospital profit and quality?* (Zallocco, 1993) discussed the relationship between quality and profitability. The author studied the relationship between quality and profit levels on one hand and price, occupancy levels, and costs per patient on the other hand. The conclusions were: First, low quality hospitals have much lower levels of profitability than high quality hospitals; second, low profit and quality does not result in lower demand; third, poor quality hospitals are understaffed and have inadequate investment in capital assets.

Review of the important element of 7Ps – place – reveals the following facts. Wilbur and James (1982)'s study, *Identifying market Segments within a health care delivery system* applied a two stage methodology for

identifying healthcare market segments. Marie-Odile (2010)'s study, *Modeling the impact of internet atmospherics on surfer behavior* examines the role of Internet atmospherics cues on the behavior of surfers and their impact on variables such as site attitudes, site involvement, exploratory behavior, pre-purchase and purchase intentions. Literature related to promotional activities in hospitals - Building a strong services brand: lessons from Mayo Clinic (Leonard and Kent, 2008) explains the branding services model by showing how one organization has created, extended, and protected a powerful brand through an unwavering commitment to the well being of its customers. *Brand equity in hospital marketing* by (Kyung et al., 2008) identifies five factors that influence the creation of brand equity through successful customer relationships. In an article, *Assessing advertising Content in a Hospital Advertising Campaign* (Menon et al., 2006) have designed a measure advertising content based on the cognitive and affective elements of informational (that is information processing) and transformational (experiential) content. Tudor and Kanth (1994), in their work, *Hospital advertising: The influence of perceptual and demographic factors on consumer dispositions* discuss the perceptions of consumers towards hospital advertising.

Erdem and Harrison-Walker (2006), in their article, *The role of the Internet in physician—patient relationships* explains the importance of Internet in building physician-patient relationship in their marketing activities of health care units. Wan-I Lee et al. (2013), in their work, *The exploration of consumers behavior in choosing hospital by the application of neural network* explain the application of neural network to classify consumers' behavior in choosing hospitals. The article, *Concepts in service marketing for healthcare professionals* (Christopher et al., 2001) showed that patients are becoming increasingly involved in making healthcare choices as their burden of healthcare costs continues to escalate. The article, *Consumer Empowerment Behavior and Hospital Choice* (Weng, 2013), investigates the behavior and a patient's choice of hospitals. The article, *Enhancing Competitive Advantage of Hospitals through Linguistics Evaluation on Customer Perceived Value* (Feng-Chuan, 2013) precisely exploits the value attributes perceived by customers. The article, *Hospital choice factor: A case study in Turkey* (Sreenivas et al., 2013) examines the factors affecting hospital choice decisions of 869 patients in three public and one private hospital polyclinics in Turkey and attempts to determine their important levels. This study highlights the importance of accessibility of hospital services to consumers in hospital, physical appearance, and technological capabilities in informing choices. These findings are useful for managers to understand how patients make choices related to health care facilities and to develop marketing strategies that may more effectively market their facilities. The paper that explained the importance of process in success of hospital include *Structuring*

the marketing function in complex professional service organizations (Laing and McKee, 2000); it examines the organizational solutions adopted by self-governing hospitals in managing the marketing function. The core theme that emerges from the research is the imperative for such professional service organizations to facilitate the development of flexible project focused marketing teams, effectively mirroring the notion of the buying center, capable of integrating core technical professionals directly into marketing process.

METHODOLOGY FOR DATA ANALYSIS

The data are analyzed with statistical tools like percentages, Mean, Standard Deviation, ANOVA to know whether the perceptions of respondents are indistinguishable or not in relation to 7Ps.

The next part of the paper examines implementation of 7Ps – product, price, place, promotion, people, physical evidence and process – in selected hospitals.

Selection of sample hospitals

The researchers have selected two corporate hospitals in Hyderabad, Andhra Pradesh. They are APOLLO and CARE which have similar and almost identical facilities.

1. The two hospitals under study provide tertiary care.
2. The two sample hospitals are located in Hyderabad within the distance of 6 km from each other.
3. The two hospitals have almost similar physical area, comprehensive equipment, skilled medical specialists and nursing staff with common set of policies and procedures.
4. The two hospitals are run on modern scientific and high tech lines, under the control of private management.

Selection of sample size and its justification

A detailed study of two super-specialty hospitals (APOLLO and CARE) was done. In each hospital, the sample is taken from two categories after giving adequate representation. They include Doctors and Administrators. Administrators here mean the people who involved in decision making process. Some of the doctors who are acting as decision makers are also included under the head of Administrators. Table 1 shows the population of two selected super specialty hospitals and sample size of selected hospitals.

Pertaining to the questionnaire containing Doctors in APOLLO, out of 156 doctors, the questionnaire was distributed to 85 and 75 response sheets were taken for final analysis. Out of 127 Doctors in CARE, the questionnaire was distributed to 90 and 75 response sheets were

Table 1. Population and sample size in selected hospitals.

Particulars	APOLLO		CARE		Total	
	Population	Sample	Population	Sample	Population	Sample
Administrators	45	35	40	35	85	70
Doctors	156	75	127	75	283	150

Table 2. Experience and qualifications of sample administrators and doctors in selected hospitals.

Particulars	Administrators			Doctors		
	APOLLO	CARE	Total	APOLLO	CARE	Total
EXPERIENCE						
Below 10 Yrs	22.8	34.2	28.5	24.0	29.3	26.7
10 yrs-20 Yrs	51.5	48.6	50.0	37.3	43.9	40.7
Above 20 Yrs	25.7	17.2	21.5	38.7	26.6	32.7
Total	35	35	70	75	75	150
QUALIFICATIONS						
Graduation	37.2	22.9	30.0	10.6	15.9	13.3
P G	34.3	54.3	44.3	35.9	42.7	39.3
Specialization	28.5	22.8	25.7	53.5	41.3	47.3
Total	35	35	70	75	75	150

selected for final analysis. The questionnaires developed for Administrators were distributed to 45 in APOLLO, and 35 were selected as sample for final analysis. Out of 40 administrators in CARE, 35 are selected for final analysis (Table 2).

Collection of Data

For collection of data, efforts were made to elicit the opinions through personal interviews and through distribution of questionnaires. The instrument was tested for its reliability and validity. A five point scale (Summated Scale) is used. It contains the columns of strongly agree, agree, cannot say, disagree and strongly disagree. While developing the questionnaire researchers have taken help from the different eminent people in the concerned area. Observation method is also used while collecting the data.

Product: The product mix in hospitals in terms of its length consists of three product lines – Inpatient services, Ambulatory services, and Health promotion. Each product line will have certain width – the patient services include medical/ surgical, pediatric, obstetric and cardiac intensive care and each product item will have certain depth – for example, a hospital may contain fifteen pediatric beds. Various services in service mix are different in their relative contribution to the organization. Some

constitute the core service of the hospital and others are ancillary services. The core product answers the questions like, are consumer's really looking? What service is really satisfying? The core service stands at the center of the total service. At the second level, the product consists of the features, quality, styling of the core service. The third level of service includes augmented product. If the hospital offers additional services or benefits beyond the tangible service is an augmented service. In both the selected hospitals services are divided into core, tangible, augmented services. The product – mix in APOLLO includes medical and surgical services, ICU services, pain relief services, emergency services, supporting services and special services like health check up services, diagnostic services etc. APOLLO corporate services and blood bank services are the augmented services. On the other hand, the product – mix in CARE include medical, surgical, laboratory, online, blood bank, and emergency services. When researches look into the services of both the hospitals it is observed that APOLLO is concentrating on generating the core and tangible services, and the CARE is concentrating on core and augmented services. After observing the length, width and depth of both hospitals, it can be concluded that both hospitals are striving for quality health care.

Table 3 reveals the item-wise analysis of perceptions of administrators on product in the sample hospitals. In APOLLO mean values of perceptions are 'providing

Table 3. Mean and S.D of administrators and doctors perceptions about the product.

Particulars	Administrators(N=35)				Doctors(N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D.	Mean	S.D.
The services provided at hospital are attractive	2.08	1.12	1.97	0.82	1.97	0.82	1.66	0.70
Case history of patients is always available and helpful in treatment.	2.82	1.36	2.20	1.05	2.20	1.05	2.53	0.72
In emergency situations you recommend the patients to go some other hospitals.	2.62	1.49	2.60	1.46	2.60	1.46	3.20	1.11
Hospital operation theaters are convenient for conducting Operations.	2.05	1.16	2.20	1.28	2.20	1.28	2.33	0.94
The package services at the hospital are satisfactory	2.37	1.21	2.46	1.21	2.46	1.21	3.00	0.63
The diet supplied helps in better recovery.	1.80	1.05	2.33	1.25	2.33	1.25	2.40	0.88
The ambulatory services are good	1.68	0.96	2.40	1.09	2.40	1.09	2.41	0.61
Same day surgery services increasing hospital image.	1.88	1.10	2.73	1.18	2.73	1.18	2.38	0.76
Equipment is latest	1.94	1.08	2.40	1.20	2.40	1.20	2.36	0.96
Telemedicine services are useful.	1.57	0.55	2.66	1.14	2.66	1.14	2.46	0.81
The nursing staff is competent, and cooperative.	1.54	0.56	2.00	1.16	2.00	1.16	1.94	0.65
Housekeeping department is doing well.	1.97	1.12	2.56	1.16	2.56	1.16	2.56	0.96
ICU services are good	1.85	1.11	2.00	0.82	2.00	0.82	2.00	0.90
The hospital is having good patient care.	1.91	1.01	2.46	1.41	2.46	1.41	2.46	1.09
hospital transportation services are satisfactory	2.20	1.20	2.69	1.07	2.69	1.07	2.93	0.68
Reception services are good.	1.85	1.08	2.10	1.15	2.10	1.15	2.40	1.09
pharmacy services are providing required medicines	1.94	1.08	1.93	1.06	1.93	1.06	2.02	0.73
When compared to other corporate hospitals, this hospital is providing better services to the patients.	1.54	0.56	1.86	0.89	1.86	0.89	2.20	0.91
Centralized patient services are good.	2.05	1.18	2.42	1.14	2.42	1.14	2.33	0.70
This hospital is capable in developing new services.	2.00	1.05	2.93	1.34	2.93	1.34	2.94	0.97

services' (2.08), 'maintenance of case history of patients' (2.82), 'maintenance of emergency services' (2.62), 'providing surgical services' (2.05), 'packaging services' (2.37), 'diet services' (1.80), 'ambulatory services' (1.68), 'image on providing same day surgeries' (1.88), 'quality of diagnostic services' (1.94), 'usefulness of telemedicine services for timely treatment' (1.57), 'nursing services' (1.54), 'housekeeping services' (1.97), 'ICU services' (1.85), 'patient care' (1.91), 'transportation services' (2.20), 'reception services' (1.85), 'pharmacy services' (1.94), 'availability of special services' (1.54), 'centralized patient services' (2.05), 'developing and launching new services' (2.00). In CARE mean values of the perceptions of administrators are - 'providing services' (2.00), 'maintenance of case history of patients' (1.42), 'maintenance of emergency services' (2.48), 'providing surgical services' (2.71), 'packaging services' (2.14), 'diet services' (1.77), 'ambulatory services' (2.62), 'image on providing same day surgeries' (1.94), 'quality of diagnostic services' (2.71), 'usefulness of telemedicine services for timely treatment' (2.02), 'nursing services' (1.57), 'housekeeping services' (1.85), 'ICU services' (1.94), 'patient care' (1.94), 'transportation services' (2.08), 'reception services' (1.68), 'pharmacy services' (2.00), 'availability of special services' (1.65), 'centralized patient services' (1.91), 'developing and launching new services' (1.94).

Item-wise analysis of perceptions of doctors on product mix in the sample hospitals is as follows. In APOLLO mean values of the perceptions are - 'providing services' (1.97), 'maintenance of case history of patients' (2.20), 'maintenance of emergency services' (2.60), 'providing surgical services' (2.20), 'packaging services' (2.46), 'diet services' (2.33), 'ambulatory services' (2.40), 'image on providing same day surgeries' (2.73), 'quality of diagnostic services' (2.40), 'usefulness of telemedicine services for timely treatment' (2.66), 'nursing services' (2.00), 'house keeping services' (2.56), 'ICU services' (2.00), 'patient care' (2.46), 'transportation services' (2.69), 'reception services' (2.10), 'pharmacy services' (1.93), 'availability of special services' (1.86), 'centralized patient services' (2.42), 'developing and launching new services' (2.93). In CARE, the mean values of perceptions of doctors are - 'providing services' (1.66), 'maintenance of case history of patients' (2.53), 'maintenance of emergency services' (3.20), 'providing surgical services' (2.33), 'packaging services' (3.00), 'diet services' (2.40), 'ambulatory services' (2.41), 'image on providing same day surgeries' (2.38), 'quality of diagnostic services' (2.36), 'usefulness of telemedicine services for timely treatment' (2.46), 'nursing services' (1.94), 'housekeeping services' (2.56), 'ICU services' (2.00), 'patient care' (2.46), 'transportation services' (2.93), 'reception services' (2.40), 'pharmacy services'

Table 4. Pricing structure of rooms in APOLLO.

Category of room	Facilities	Price per day (Rs)
APOLLO suite	Air-conditioning, dining room, waiting room, patient cot, attendant cot, two televisions, sofa seat, two telephones, refrigerator, dining table, computer with inter-net, ward robe, microwave oven, massage chair.	10,000-00
Executive room	Air-conditioning, television, refrigerator, sofa seat, ward robe, patient cot, attendant cot, computer with inter-net, ward robe, microwave oven.	8000-00
Deluxe room	Individual air-conditioned room large than a single room, patient cot, an attendant cot, television, refrigerator, cupboard and sofa.	6000-00
Single room	Individual air-conditioned room with attached wash room, specially designed floor, television, telephone and a couch.	5000-00
Semi-private room	Two air-conditioned rooms inter connected by a wash room, each room has a television, telephone and a couch.	3000-00
Double sharing room	Air- conditioned room with two beds separated by a screen and a wash room with a television, telephone and a couch.	1000-00
Special general ward	Non-air conditioned room with three beds and a wash room.	450-00
General ward	Room with six to ten beds and a wash room.	350-00
Platinum ward	Exclusive for custom-built services for patients being admitted	15000-00

(2.02), 'availability of special services' (2.20), 'centralized patient services' (2.33), 'developing and launching new services' (2.94). From this it can be concluded that the product mix has got positive rating by the respondents in all aspects.

Pricing: Pricing is the most often used to describe the actual charge made by an organization. In hospital prices go by various names. Pricing in hospital services is generally done by keeping in view the cost of running the hospital, the overheads, salaries of the doctors, nurses and administrative staff, cost of infrastructure, bed occupancy, quality of service etc. In APOLLO, the pricing is described in three heads: 1.Fees 2.Inpatient charges 3.Third party reimbursement. These three heads are based on the costs of producing the service. While fixing the prices of the services, APOLLO is considering the actual charges made by the hospital along with effort costs, psychic costs and waiting costs. Table 4 reveals the pricing structure for different categories of rooms, with facilities in APOLLO.

Pricing in CARE largely based on costs, which are broadly divided in to direct and indirect. Before finalizing price for service, CARE tries to know the cost for providing those services and considering all the related components while calculating total cost of service. It is taking fixed and variable costs to determine final price. After fixing the prices scientifically, the management decides how much subsidy is to be extended. For

inpatients the hospital is charging on the basis of variable costs and based on the category of bed he is opting for. Table 5 gives the details.

The authorities of APOLLO differentiate the pricing structure based on different categories of rooms and facilities that are being provided by them. For maximizing the service utilization APOLLO fixes lower prices for certain services. Pricing in CARE hospital is largely based on costs which are divided into direct, indirect and graduated costs. Before fixing the prices the hospital tries to know the exact cost of service and it inquires the prevailing costs in other hospitals of that region.

The mean values of Administrators perceptions of APOLLO are - 'affordability of services' (2.40), 'quality of services depends on price' (2.22), 'serving only higher income level' (2.37), 'individual pricing' (2.40), 'chargers for laboratory tests' (1.77), 'stabilized pricing policies' (2.00) (Table 6). The mean values of perceptions of Doctors in CARE are - 'affordability of services' (1.85), 'quality of services depends on price' (3.91), 'serving only higher income level' (2.34), 'following charges that the other hospitals follow' (4.11), 'chargers for laboratory tests' (2.08), 'stabilized pricing policies' (2.11).

The mean values of perceptions of Doctors in APOLLO are - 'affordability of services' (2.73), 'quality of services depending on price' (3.26), 'serving only higher income level' (2.92), 'following charges that the other hospitals follow' (3.14), 'chargers for laboratory tests' (3.60), 'stabilized pricing policies' (3.00). Mean values of the perceptions of the Doctors in CARE are - 'affordability of

Table 5. Room charges in CARE.

Types of room	Facility	Price per day (Rs)
General Ward	Twenty Beds In One Room	250-00
Semi-Private Room	Five Beds In One Room	500-00
Single Room	Non-Air-Conditioned (Individual)	750-00
Single Room	Air-Conditioned (Individual)	1000-00
Deluxe Room	Air-Conditioned, Other Facilities	2,000-00
Executive Room	Air-Conditioned, Other Facilities	3,500-00
CARE Suit	Air-Conditioned, Other Facilities	5,000-00

Table 6. Mean and S.D of administrators and doctors perceptions on the price.

Particulars	Administrators (N=35)				Doctors (N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Prices are affordable	2.40	1.45	1.85	1.24	2.73	1.39	3.00	1.03
Treatment quality depends on price.	2.22	1.16	3.91	1.12	3.26	0.93	3.22	0.53
High income group patients visit	2.37	1.35	2.34	1.16	2.92	0.86	2.80	0.40
The hospital fixes tariffs based on other hospitals.	2.40	1.45	4.11	1.05	3.14	1.36	3.53	1.09
The charges in hospital are reasonable.	1.77	0.84	2.08	1.19	3.60	1.15	3.73	0.93
Follow stabilized pricing policies.	2.00	1.02	2.11	1.20	3.00	1.21	3.66	0.70

services' (3.00), 'quality of services depends on price' (3.22), 'serving only higher income level' (2.80), 'following charges that the other hospitals follow' (3.53), 'chargers for laboratory tests' (3.73), 'stabilized pricing policies' (3.66). From this it can be understood that the prices in both hospitals reveal positive response from the respondents.

Place: Hospitals should be easily accessible to the patients and be adequately protected from pollution. Every hospital should try to make services available and accessible to its target consumers. While distributing health care accessibility with physicians, hospital administrators, donors, government, insurance companies, employers is needed. Thus hospitals have to take three major distribution decisions. They include physical access (channels, location, and facilities), time access and promotional access. APOLLO is utilizing different channels for delivery of health services to the needy. In APOLLO, the patients get surgery on an inpatient or outpatient basis or in free-standing one-day surgery in centers. APOLLO changes the channels of distribution in obstetrics, and moves the birth process out of traditional labor and delivery rooms into hospital-based alternative birth centers and occasionally into the home. APOLLO arranges mobile vans for delivering medical care and health screening tests at shopping malls, schools and worksites. The main campus of APOLLO is located at

film nagar, heart of the city spread over a campus area of 35 acres, within built-up area of 190,000 sft with a patient serving capacity of 1, 00,000 per year. APOLLO is located in 17 other places in India. The distribution channels of CARE are explained in terms of two aspects. The first one is location of the hospital and the second aspect includes the facilities, branches located in the same city and over the country with specializations, community outreach programmes, satellite clinics which deliver health services at the people's doorstep. APOLLO and CARE have convenient places as they are located at central part of the city and accessible with different transportation systems. It is observed that outpatient department timings are not convenient in CARE and patients feel comfortable with the OP timings of APOLLO. But it may be stated that the two hospitals are enjoying satisfactory distribution network of their services.

The mean values of perceptions of administrators in APOLLO are (Table 7) - 'receiving patients from the all places' (1.82), 'need to extend services some other places' (4.17), 'hospital adequately protected from pollution' (1.77), 'visiting/consulting employee at some other hospitals' (4.51), 'hospital well noted to other hospitals' (1.94), 'time and place convenient for the patients' (1.82), 'right location of hospital' (1.82). In CARE, 'receiving patients from the all places' (2.00), 'need to extend services to some other places' (4.00), 'hospital adequately protected from pollution' (1.91), 'visiting/consulting employee at some other hospital'

Table 7. Mean and S.D of administrators and doctors perceptions on the location.

Particulars	Administrators (N=35)				Doctors (N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Patients are from all the places.	1.82	0.89	2.00	1.08	2.62	1.08	3.13	1.09
Larger scope of extending services	4.17	0.89	4.00	1.08	3.37	1.08	2.86	1.09
Protected from pollution.	1.77	1.00	1.91	1.12	2.66	1.30	2.26	0.77
Are you a consulting employee?	4.51	0.50	4.25	0.70	2.80	1.47	4.38	0.61
hospital is well reputed	1.94	1.16	1.74	0.91	2.56	1.35	2.60	1.09
Hospital have place convenience	1.82	0.92	1.88	0.90	2.78	1.26	2.93	1.00
Hospital is located at a right place.	1.82	0.92	1.88	0.90	2.78	1.26	2.93	1.00

(4.25), 'hospital well noted to other hospitals' (1.74), 'time and place convenient for the patients' (1.88), 'right location of hospital' (1.88).

The analysis on Perceptions of the Doctors in APOLLO includes: 'receiving patients from the all places' (2.62), 'need to extend services some other places' (3.37), 'hospital adequately protected from pollution' (2.66), 'visiting/consulting employee at some other hospital' (2.80), 'hospital well noted to other hospitals' (2.56), 'time and place convenient for the patients' (2.78), 'right location of hospital' (2.78). In CARE, 'receiving patients from all places' (3.13), 'need to extend services some other places' (2.86), 'hospital adequately protected from pollution' (2.26), 'visiting/consulting employee at some other hospital' (4.38), 'hospital well noted to other hospitals' (2.60), 'time and place convenient for the patients' (2.93), 'right location of hospital' (2.93). Therefore, it may be said that place has positive response from the respondents.

Promotional activities: The five tools of the marketing mix – service, price, place, promotion, and people are communication tools. Messages are carried to the market by the service's styling and features, its offering price and the places and times through promotion function. The promotional tools are numerous and varied. These tools fall into four groups - Advertising, sales promotion, personal selling, and publicity. The promotion mix of APOLLO is based on advertisement, promotion of services, publicity of service, personal selling and public relations. APOLLO uses print and electronic media such as magazines, news papers, television and posters, sky-writing, calendars, cards, catalogs, directories, programmes, circulars, internet etc, for the promotion of their services. APOLLO tries to build up brand image in some of their services like bypass surgeries, diagnosis, pharmacy etc. APOLLO started a separate public relation department for delivering functions of developing media relations, publications, and community relations. CARE gives equal importance to image and product advertising

in their promotional campaign. For this purpose, CARE prefers electronic media and web based advertisements. CARE advertises through news papers, magazines and bill boards, displays, posters, traveling displays, station posters, direct mail advertising etc. Apart from the above methods, CARE is following other methods like distributing souvenirs, brief presentations by the surgeons on kidney transplantation and other critical surgeries on the screen, etc. Hospitals provide medical insurance, immunization and other health records, health facts, health related articles, up-to-date papers for distribution.

The means values of perceptions of administrators on the promotional mix of APOLLO are (Table 8) - 'hospital is able to propagate services' (2.08), 'feeling as a direct promoter of hospital services' (1.86), 'special promotional campaigns gaining the attention of the needy' (1.91), 'response of patients on special campaigns' (1.91), 'special programs in T.V and radio increasing reputation of hospital' (1.94), 'strong brand image of the hospital' (1.88). In CARE, 'hospital is able to propagate services' (1.77), 'feeling as a direct promoter of hospital services' (1.80), 'special promotional campaigns gaining the attention of the needy' (1.82), 'response of patients on special campaigns' (1.82), 'special programs in T.V and radio increasing reputation of hospital' (2.17), 'strong brand image of the hospital' (1.94).

The analysis on mean values of perceptions of the Doctors includes 'hospital is able to propagate services' (2.53), 'feeling as a direct promoter of hospital services' (2.82), 'special promotional campaigns gaining the attention of the needy' (2.94), 'response of patients on special campaigns' (2.94), 'special programs in T.V and radio increasing reputation of hospital' (2.53), 'strong brand image of the hospital' (2.20). In CARE, 'hospital is able to propagate services' (2.73), 'feeling as a direct promoter of hospital services' (2.53), 'special promotional campaigns gaining the attention of the needy' (2.93), 'response of patients on special campaigns' (2.93), 'special programs in T.V and radio increasing reputation of hospital' (2.86), 'strong brand image of the hospital' (2.40). Therefore, it can be said that the promotional mix

Table 8. Mean and S.D of administrators and doctors perceptions about promotion mix.

Particulars	Administrators (N=35)				Doctors (N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
The hospital is able to propagate its services to patients and their relatives.	2.08	1.26	1.77	0.97	2.53	1.21	2.73	1.13
You are feeling yourself as a direct promoter of the hospital.	1.80	0.83	1.80	1.27	2.82	1.41	2.53	1.09
Hospital promotional campaigns are gaining the attention of the needy.	1.91	1.14	1.82	0.82	2.94	1.29	2.93	1.06
Special campaigns at concession rates are getting good response from patients.	1.91	1.14	1.82	0.82	2.94	1.29	2.93	1.06
The talk by doctors in T.V and radio are successful	1.94	1.02	2.17	1.38	2.53	0.96	2.86	0.81
This hospital have brand image.	1.88	1.15	1.94	0.99	2.20	1.17	2.40	0.88

Table 9. Mean and S.D of administrators and doctors perceptions about people mix.

Particulars	Administrators(N=35)				Doctors(N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Doctors with excellent knowledge.	2.11	1.27	2.71	1.29	1.60	0.61	2.00	0.36
Highly skilled doctors are available.	2.08	1.27	1.68	0.67	2.18	1.13	2.00	0.36
Doctors with right attitude.	2.22	1.28	2.00	1.13	2.40	1.41	2.20	0.85
Doctors treat all the patients alike.	2.25	1.22	2.08	1.19	3.14	1.36	2.90	0.97
Supporting staff play important role.	1.57	0.60	1.54	0.65	1.93	0.93	1.77	0.64
The supporting staff and nurses are qualified.	1.57	0.64	1.51	0.56	2.26	1.18	1.94	1.37
The house keeping personnel are gentle	1.97	1.12	1.85	1.00	2.56	1.16	2.56	0.96
Customer awareness programs are helpful	2.22	1.35	1.88	1.02	2.22	1.10	2.00	0.90
The staff is sympathetic towards patients	2.57	1.42	1.65	0.90	1.94	1.19	1.86	0.89

in both hospitals are well perceived by the respondents.

People: The people in a hospital consist of doctors, nurses, paramedical staff, supporting staff and front office executives. APOLLO manages personnel, by developing and enhancing a systematic service culture. APOLLO has human resource department with eminent people in the concerned field. This department attends different functions like man power planning, training, and motivation, evaluating, and rewarding for building competent personnel. The people in CARE are classified as high contact people and low contact people. High contact service people include doctors and nursing staff who are engaged in providing the services to the patients round the clock. The administrators, supportive service people come under low contact. CARE tries to attract and retain doctors with knowledge and skills. The employee motivation is satisfactory in both hospitals.

The mean values of perceptions of Administrators on HR Practices of APOLLO are (Table 9) - 'doctors with excellent knowledge' (2.11), 'doctors having skills' (2.08), 'right attitude of the doctors' (2.22), 'doctors dealing with all the patients alike' (2.25), 'supporting staff play important role for better recovery of patients' (1.57), 'qualified

nursing and supporting staff' (1.57), 'house-keeping personnel well mannered, gentle, hygienic and meticulous' (1.97), 'customer awareness programs enables patients in getting the value and quality health care' (2.22), 'staff sympathy towards patient problems' (2.57). In CARE, 'doctors with excellent knowledge' (2.71), 'doctors having skills' (1.68), 'right attitude of the doctors' (2.00), 'doctors dealing with all the patients alike' (2.08), 'supporting staff play important role for better recovery of patients' (1.54), 'qualified nursing and supporting staff' (1.51), 'house-keeping personnel well mannered, gentle, hygienic and meticulous' (1.85), 'customer awareness programs enables patients in getting the value and quality health care' (1.88), 'staff sympathy towards patient problems' (1.65).

The mean values on perceptions of Doctors on HR Practices of APOLLO are 'doctors with excellent knowledge' (1.60), 'doctors having skills' (2.18), 'right attitude of the doctors' (2.40), 'doctors dealing with all the patients alike' (3.14), 'supporting staff play pivotal role for better recovery of patients' (1.93), 'qualified nursing and supporting staff' (1.93), 'housekeeping personnel well mannered, gentle, hygienic and meticulous' (2.56), 'customer awareness program enables patients in getting the value and quality health care' (2.22), 'staff sympathy towards patient problems' (1.94). In CARE 'doctors with

Table 10. Mean and S.D of administrators and doctors perceptions about physical evidence.

Particulars	Administrators (N=35)				Doctors (N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Hospital is making a positive impression	1.68	0.83	2.00	1.18	2.26	1.24	2.26	0.77
The interior decoration is very good.	1.71	0.71	1.85	0.80	2.00	1.21	2.13	0.89
Lighting and ventilation is good.	2.14	1.14	1.74	0.88	2.66	1.30	2.46	1.21
Electricity facilities are good.	2.17	1.07	1.68	0.96	1.92	1.35	1.73	0.93
Drinking water facility is good.	2.11	1.02	1.68	0.79	2.33	1.54	1.52	0.72
Sewerage facilities are good	2.02	1.33	1.91	1.09	1.70	0.56	1.60	0.61
Communication facilities are good	2.17	1.09	1.74	0.81	2.46	1.21	2.00	1.16
Transportation facilities are satisfactory	2.20	1.20	2.08	1.26	2.69	1.07	2.93	0.68
Tightened security	2.08	1.33	1.54	0.61	2.01	1.27	2.13	1.09
Awards and certificates are won by the doctors and the hospitals are increasing in confidence	2.08	1.26	1.91	1.17	2.53	1.31	2.46	0.81

excellent knowledge' (2.00), 'doctors having skills' (2.00), 'right attitude of the doctors' (2.20), 'doctors dealing with all the patients alike' (2.90), 'supporting staff play important role for better recovery of patients' (1.77), 'qualified nursing and supporting staff' (1.94), 'housekeeping personnel well mannered, gentle, hygienic and meticulous' (2.56), 'customer awareness programs enable patients in getting the value and quality health care' (2.00), 'staff sympathy towards patient problems' (1.86). From the description, it can be said that, the respondents of both hospitals have good opinion on HR Practices of the hospital.

Physical evidence: The physical evidence essentially wraps the service and conveys an external image what is inside to consumers. The physical evidence of APOLLO includes admission office, signs, patient care room, medical equipment, recovery room, building exterior, employee uniforms, reports and stationary, billing statements, website etc. Physical evidence of CARE can be witnessed through entrance, lobby area, parking area, waiting area, public toilet facilities, signage system, gift, book and florist's shops, coffee shop-cum-snack bar, interior decoration, lighting and ventilation, uninterrupted power supply, drinking water facilities, sewerage, telephone and communication facilities, transportation facilities, security and display of awards and certificates won by doctors and hospital etc.

The mean values of perceptions of administrators on physical evidence in the hospital are (Table 10) - 'making positive impression on patients' (1.68), 'interior decoration is good' (1.71), 'lighting and ventilation is good' (2.14), 'electricity is good' (2.17), 'good in the aspect of drinking water' (2.11), 'good in the aspect of sewerage' (2.02), 'good in the aspect of communication facilities' (2.17), 'good in the aspect of transportation facilities' (2.20), 'good in the aspect of security' (2.08), 'able to

build up confidence in the patients by displaying awards and certificates by the doctors' (2.08). In CARE, 'making positive impression on patients' (2.00), 'interior decoration is good' (1.85), 'lighting and ventilation is good' (1.74), 'electricity is good' (1.68), 'good in the aspect of drinking water' (1.68), 'good in the aspect of sewerage' (1.91), 'good in the aspect of communication facilities' (1.74), 'good in the aspect of transportation facilities' (2.08), 'good in the aspect of security' (1.54), 'able to build up confidence in the patients by displaying awards and certificates by the doctors' (1.91).

The mean values of perceptions of Doctors on physical evidence in APOLLO includes 'making positive impression on patients' (2.26), 'interior decoration is good' (2.00), 'lighting and ventilation is good' (2.66), 'electricity is good' (1.92), 'good in the aspect of drinking water' (2.33), 'good in the aspect of sewerage' (1.70), 'good in the aspect of communication facilities' (2.46), 'good in the aspect of transportation facilities' (2.01), 'good in the aspect of security' (2.01), 'able to build up confidence in the patients by displaying awards and certificates by the doctors' (2.53). In CARE, 'making positive impression on patients' (2.26), 'interior decoration is good' (2.13), 'lighting and ventilation is good' (2.46), 'electricity is good' (1.73), 'good in the aspect of drinking water' (2.52), 'good in the aspect of sewerage' (1.60), 'good in the aspect of communication facilities' (2.00), 'good in the aspect of transportation facilities' (2.93), 'good in the aspect of security' (2.13), 'able to build up confidence in the patients by displaying awards and certificates by the doctors' (2.46). The result reveals that the respondents in both hospitals have positive impression about physical evidence in the hospital.

Process: Process is an essential ingredient in the production and delivery of service. Since the inseparable nature of services does not allow any differences in the

Table 11. Mean and S.D of administrators and doctors perceptions on the process.

Particulars	Administrators (N=35)				Doctors (N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Treatment process is lengthy and time consuming.	3.45	0.78	4.11	0.63	3.80	0.65	3.66	0.79
Bill settlement process is simple.	2.11	1.30	1.97	1.07	2.08	0.98	2.06	0.85
Discharge procedures are simple.	1.62	0.80	1.71	0.75	2.26	1.24	2.4	1.31
Emergency entry is complicated.	2.20	1.05	2.74	1.01	2.85	1.30	3.21	1.32
Service counters are sufficient.	2.14	1.39	2.11	0.99	1.86	0.89	2.00	0.73
Waiting time is reasonable.	2.57	0.85	1.88	0.63	2.20	0.65	2.33	0.79

production and delivery of a service, process becomes an all-inclusive 'P' for service marketers. The APOLLO has simplified the procedure for admission for treatment. It has taken all measures to extend medical treatment in single premises, which has created easy accessibility to all patients to avail the services of various specialized doctors. APOLLO has instituted several registration centers at different places in the state. The patients, who want to take appointment may consult these centers and can get appointments for the consultation. The process followed at CARE is simple, patient friendly and time saving. The out patients who want to take treatment in CARE have to take prior permission or appointment from registration department in consultation with the doctor concerned. To avoid congestion and to save the time of patients/visitors, CARE has made arrangements to get appointment through e-mail, phone.

The mean values of perceptions of administrators on the process mix in APOLLO are (Table 11) - 'to get treatment the process is very lengthy and time consuming' (3.45), 'bill settlement process is simple' (2.11), 'process to discharge the patient is simple' (1.62), 'complicated process for emergency discharge' (2.20), 'sufficient service counters' (2.14), 'length of waiting time is reasonable' (2.57). In CARE, 'process is very lengthy and time consuming' (4.11), 'bill settlement process is simple' (1.97), 'process to discharge the patient is simple' (1.71), 'complicated process for emergency discharge' (2.74), 'sufficient service counters' (2.11), length of waiting time is reasonable' (1.88).

The mean values of perceptions of doctors on the process mix of the APOLLO includes 'to get treatment the process is very lengthy and time consuming' (3.80), 'bill settlement process is simple' (2.08), 'process to discharge the patient is simple' (2.26), 'complicated process for emergency discharge' (2.85), 'sufficient service counters' (1.86), length of waiting time is reasonable' (2.20). In CARE, 'process is very lengthy and time consuming' (3.66), 'bill settlement process is simple' (2.06), 'process to discharge the patient is simple' (2.40), 'complicated process for emergency discharge' (3.21), 'sufficient service counters' (2.00), length of waiting time is reasonable' (2.33). It may be concluded that

respondents of both hospitals have positive opinion about process mix.

Rating of marketing mix

Table 12 represents the perceptions of administrators about the Seven Ps in sample hospitals showing that the P's entire are positively opinioned by the respondents in the two sample hospitals. The mean scores are in the range of 1.92 to 2.55 and 1.88 to 2.73 in APOLLO and CARE hospitals respectively; on a 5 point scale indicating marketing mix of the sample hospitals is agreeable to the respondents. The table represents the perceptions of doctors on the Seven Ps in sample hospitals, showing that the P's entire are positively opinioned by the respondents in the two sample hospitals. The mean scores are in the range of 2.34 to 3.10 and 2.42 to 3.32 in APOLLO and CARE hospitals respectively; on a 5 point scale, indicating Seven Ps of the sample hospitals is agreeable to the respondents (Table 13).

In order to find whether the perceptions of the administrators in the two hospitals are indistinguishable, the null hypothesis is framed as-

"The perceptions of the administrative personnel are indistinguishable with respect to the 7P's of APOLLO and CARE"

Table 14 represents the ANOVA of administrators' opinion on 7P's in APOLLO; it shows the level of significance or risk probability is greater than .05; so the hypothesis is accepted. Therefore, it can be said that, the perceptions of administrators are indistinguishable, that is, the perceptions of the administrators do not differ much from one another in the 7P's. At the same time the ANOVA of administrators' opinion on the 7P's in CARE hospital shows the level of significance or risk probability is less than 0.5; so the hypothesis is rejected. Therefore, it can be said that, the perceptions of administrative personnel are distinguishable, that is, the perceptions of the administrators do not differ from one another (Table 15).

In order to find whether the perceptions of the doctors

Table 12. Grand mean and S.D. on perceptions of administrators and doctors about the 7Ps.

Particulars	Administrators (N=35)				Doctors(N=75)			
	APOLLO		CARE		APOLLO		CARE	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Product	1.94	0.29	2.01	0.28	2.34	0.28	2.42	0.20
Price	2.19	0.59	2.73	0.53	3.10	0.42	3.32	0.31
Place	2.55	0.38	2.52	0.36	2.79	0.48	3.01	0.34
Promotion	1.92	0.42	1.88	0.44	2.66	0.61	2.73	0.48
People	2.06	0.40	1.87	0.30	2.24	0.33	2.13	0.25
Physical Evidence	2.03	0.45	1.81	0.33	2.25	0.37	2.12	0.26
Process	2.34	0.59	2.42	0.37	2.50	0.36	2.61	0.47

Table 13. Mean values of administrators' perceptions about 7P's in APOLLO and CARE.

7P's	Product		Price		Place		Promotion		People		Physical-evidence		Process	
	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE
Q1	2.08	2.00	2.40	1.85	1.82	2.00	2.08	1.77	2.11	2.71	1.68	2.00	3.45	4.11
Q2	2.82	1.42	2.22	3.91	4.17	4.00	1.80	1.80	2.08	1.68	1.71	1.85	2.11	1.97
Q3	2.62	2.48	2.37	2.34	1.77	1.91	1.91	1.82	2.22	2.00	2.14	1.74	1.62	1.71
Q4	2.05	2.71	2.40	4.11	4.51	4.25	1.91	1.82	2.25	2.08	2.17	1.68	2.20	2.74
Q5	2.37	2.14	1.77	2.08	1.94	1.74	1.94	2.17	1.57	1.54	2.11	1.68	2.14	2.11
Q6	1.80	1.77	2.00	2.11	1.82	1.88	1.88	1.94	1.57	1.51	2.02	1.91	2.57	1.88
Q7	1.68	2.62	-	-	1.82	1.88	-	-	1.97	1.85	2.17	1.74	-	-
Q8	1.88	1.94	-	-	-	-	-	-	2.22	1.88	2.20	2.08	-	-
Q9	1.94	2.71	-	-	-	-	-	-	2.57	1.65	2.08	1.54	-	-
Q10	1.57	2.02	-	-	-	-	-	-	-	-	2.08	1.91	-	-
Q11	1.54	1.57	-	-	-	-	-	-	-	-	-	-	-	-
Q12	1.97	1.85	-	-	-	-	-	-	-	-	-	-	-	-
Q13	1.85	1.94	-	-	-	-	-	-	-	-	-	-	-	-
Q14	1.91	1.94	-	-	-	-	-	-	-	-	-	-	-	-
Q15	2.20	2.08	-	-	-	-	-	-	-	-	-	-	-	-
Q16	1.85	1.68	-	-	-	-	-	-	-	-	-	-	-	-
Q17	1.94	2.00	-	-	-	-	-	-	-	-	-	-	-	-
Q18	1.54	1.65	-	-	-	-	-	-	-	-	-	-	-	-
Q19	2.05	1.91	-	-	-	-	-	-	-	-	-	-	-	-
Q20	2.00	1.94	-	-	-	-	-	-	-	-	-	-	-	-

Table 14. ANOVA of administrators' perceptions about 7Ps in APOLLO and CARE.

Particulars	APOLLO					CARE				
	Sum of squares	df	Mean square	F	Sig.	Sum of squares	df	Mean Square	F	Sig.
Between Groups	2.356	6	.393	1.538	.183	5.932	6	.989	2.781	.019
Within Groups	14.554	57	.255			20.266	57	.356		
Total	16.910	63				26.198	63			

are indistinguishable the null hypothesis is framed as- "The perceptions of the doctors are indistinguishable with respect to the 7P's of APOLLO and CARE hospitals"

Table 16 represents ANOVA of doctor's perceptions on 7P's in APOLLO and CARE hospitals; it shows the level of significance or risk probability is less than .05; so the

Table 15. Mean values of doctors perceptions about 7Ps in APOLLO and CARE hospitals.

7P's	Product		Price		Place		Promotion		People		Physical-Evidence		Process	
	Qns	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO	CARE	APOLLO
Q1	1.97	1.66	2.73	3.00	2.62	3.13	2.53	2.73	1.60	2.00	2.26	2.26	3.80	3.66
Q2	2.20	2.53	3.26	3.22	3.37	2.86	2.82	2.53	2.18	2.00	2.00	2.13	2.08	2.06
Q3	2.60	3.20	2.92	2.80	2.66	2.26	2.94	2.93	2.40	2.26	2.66	2.46	2.26	2.40
Q4	2.20	2.33	3.14	3.53	2.80	4.38	2.94	2.93	3.14	2.90	1.92	1.73	2.85	3.21
Q5	2.46	3.00	3.60	3.73	2.56	2.60	2.53	2.86	1.93	1.77	2.33	1.52	1.86	2.00
Q6	2.33	2.40	3.00	3.66	2.78	2.93	2.20	2.40	2.26	1.94	1.70	1.60	2.20	2.33
Q7	2.40	2.41	-	-	2.78	2.93	-	-	2.56	2.56	2.46	2.00	-	-
Q8	2.73	2.38	-	-	-	-	-	-	2.22	2.00	2.69	2.93	-	-
Q9	2.40	2.36	-	-	-	-	-	-	1.94	1.86	2.01	2.13	-	-
Q10	2.66	2.46	-	-	-	-	-	-	-	-	2.53	2.46	-	-
Q11	2.00	1.94	-	-	-	-	-	-	-	-	-	-	-	-
Q12	2.56	2.56	-	-	-	-	-	-	-	-	-	-	-	-
Q13	2.00	2.00	-	-	-	-	-	-	-	-	-	-	-	-
Q14	2.46	2.46	-	-	-	-	-	-	-	-	-	-	-	-
Q15	2.69	2.93	-	-	-	-	-	-	-	-	-	-	-	-
Q16	2.10	2.40	-	-	-	-	-	-	-	-	-	-	-	-
Q17	1.93	2.02	-	-	-	-	-	-	-	-	-	-	-	-
Q18	1.86	2.20	-	-	-	-	-	-	-	-	-	-	-	-
Q19	2.42	2.33	-	-	-	-	-	-	-	-	-	-	-	-
Q20	2.93	2.93	-	-	-	-	-	-	-	-	-	-	-	-

Table 16. ANOVA of doctors' perceptions about 7Ps in APOLLO and CARE.

Particulars	APOLLO					CARE				
	Sum of squares	df	Mean square	F	Sig.	Sum of squares	df	Mean square	F	Sig.
Between groups	4.615	6	.769	5.360	.000	8.922	6	1.487	7.426	.000
Within groups	8.179	57	.143			11.413	57	.200		
Total	12.794	63				20.335	63			

hypothesis is rejected. Therefore, it can be said that, in both hospitals the perceptions of doctors are distinguishable.

DISCUSSION

Table 17 shows that the 7P's differ significantly among themselves with respect to the average scores of the responses provided by them in 1,2,4,5 and 6.

1. The ANOVA gave significant difference between the means of the 7P's (Product, Price, Place, Promotion, People, Physical Evidence and Process) of marketing services.

2. The figures in the brackets parenthesis indicate the rank of the corresponding mean in the ascending order.

3. The column with no-star represents the average respondents of administrators in APOLLO do not differ much in the 7P's, that is, the respondents have rated them as equally strong without much distinction among from. As none of them is more than 3, there is no evidence of any disagreement as well as no neutrality time.

4. The average P (People) with rank 1 is strongly agreeable from the respondents point of view namely doctors of the APOLLO followed by rank 2,3,4,5,6 and 7 respectively.

5. The average P (physical evidence) with rank 1 is strongly agreeable from the respondents point of view namely doctors of the CARE followed by rank 2,3,4,5,6 and 7 respectively.

6. The average P (physical evidence) with rank 1 is strongly agreeable from the respondents' point of view namely administrators followed by rank 2, 3,4,5,6 and 7

Table 17. Consolidated statistical result.

Category 7P's	APOLLO		CARE	
	*Doctors (1)	Administrators (2)	*Doctors (3)	*Administrators (4)
Product	2.3479 (3)	1.9871 (2)	2.4286 (3)	2.0228 (4)
Price	3.1110 (7)	2.1952(5)	3.3266 (7)	2.7380(7)
Place	2.7999 (6)	2.5550(7)	3.0171 (6)	2.5265 (6)
Promotion	2.6644 (5)	1.9237 (1)	2.7333 (5)	1.8904 (3)
People	2.2518 (1)	2.0666(4)	2.1466 (2)	1.8729 (2)
Physical evidence	2.2599 (2)	2.0399(3)	2.1253 (1)	1.8171 (1)
Process	2.5110 (4)	2.3523(6)	2.6133 (4)	2.4237 (5)

* The ANOVA gave significant difference between the means of the 7P's.

respectively.

Inference

The statistical analysis and the conclusions reveal that the 7P's from the hospitals people side, the responses have given a relative rating of the 7P's in five out of six cases leading to a particular 'P' being strongly agreeable, a particular 'P' is just agreeable. Therefore, respondents with a long term attachment with an organization can better distinguish the organization aspects than those who just stay for short while and leave.

Suggestions for better marketing of hospital services

The following are some of the suggestions made to the marketing managers and policy makers of hospitals. If they are implemented, the present problems in the hospitals may be overcome to a great extent. The suggestions are dealt under two heads.

- 1) General suggestions
- 2) Specific Suggestions

General Suggestions:

Marketing plan: Hospitals should prepare annual marketing plans to prepare in advance for facing the future. While preparing marketing plan, mission statement of the organization and objectives are to be considered and workable plan is to be prepared. Hospitals have to understand what they want to communicate or what it is or what it is want their target audience to know or remember, or what the hospital stands for. This is the most important part of the marketing plan. It provides the necessary directions to marketing efforts and has far reaching consequences.

Customers in Hospital Different: Hospitals should identify there is a big difference in waiting on a customer in a hospital and in any other organization. In the hospital, the consumer is a sick person. A friendly, helpful and caring attitude is very important for a hospital. The patient will immediately place his trust in the caring hands of hospital staff and assuredly feel that there is no need to be afraid. If he receives this warmth and welcome feeling all the way, the patient will become the hospital's marketing and public relation agent in the community by his word of mouth.

Customer relationship marketing: The most important aspects of a true CRM initiative lie in how the organization as a whole defines its customers, identifies and segments their needs, and organizes around serving them in the most efficient and effective manner possible. Hospital services marketers should first identify what goals are most important to the organization, and these should guide the internal planning and implementation efforts.

Establishment of Media Relations Policy: Every hospital, regardless of its size, location and whether or not it has a public relations department, must develop and enforce an official policy for dealing with the press and the kinds of information that may be released. The policy should specifically state who speaks for the hospital, whether the chief executive officer or the public relations director, or any other, and in their absence as during the night when quite often accident victims are admitted, who may be called to make a statement to the press. All those who are required to make statements to the media should be familiar with the official policy and the procedure lay down therein.

Norms for treatment: Unnecessary surgeries and laboratory tests are to be eliminated. This is possible by establishing norms for treatment. Guidelines are to be

created to curb these nefarious practices. These hospitals should be made answerable to a medical audit committee.

Specific suggestions

Strategies to strengthen the Internal Marketing

Hospitals, the public service institutions, have to apply strategies to strengthen internal marketing for its success. It is important because nursing care, the clinical skills of the medical staff and the attitudes of the para-medical and other supporting employees are pivotal for successful running of a hospital. Some concepts that strengthen the internal marketing are Total Quality Management, Business Process Re-engineering, Bench Marking, and Empowerment.

Total Quality Management (TQM): The quality in medical care refers to the degree of excellence of the care extended to the entire satisfaction of the patient, while meeting or even exceeding the accepted standard with improved efficiency related to technological advancement. Quality care is not a temporary effort but it aims at continuous improvement in the patient-care, teaching and research to make the hospital a centre of excellence in the health care system. For effective and efficient implementation of TQM programme, preparing staff in all categories to involve in quality effort is a basic prerequisite. As a next step, there should be adequate hospital information system to ensure reliable feedback. Standardization is next step. Various approaches to arrive at quality in the process of hospital activities include ---

1. Standards are to be laid down for the services of various departments. Vertical divisions between various hierarchies of staff are to be replaced with horizontal integration to develop strong lateral relationship between these groups. An evaluation system is to be developed to measure the performance of individuals to strike a balance between quality and resources.
2. Efficiency of the repeated process in hospitals can be improved by employing optimization techniques, that is, work study, Programme Evaluation Review Technique (PERT), queuing theory etc. Here, the focus is on reducing the variability of the process so as to standardize and to make the organization stable.
3. In order to improve the quality of medical services, medical audit is to be initiated. It helps in strengthening hospital procedures by exposing the bottlenecks in diagnostic and supportive services of the hospital. It acts as a stimulus to practice scientific medicine. It helps in preventing the irreparable mistakes in dealing with life of the patient. It helps in maximizing the resources with the final aim of providing better quality patient care at least cost. Medical audit gives an account of medical care rendered in terms of lives saved, avoidable and

unavoidable deaths, diseases arrested, patients restored etc.

4. In order to enhance the morale of the employees in providing quality medical care to patients, the quality circles are to be created. Quality circle is a voluntary association of workers engaged in similar work with an orientation of human relations. These circles help in developing and utilizing the human resources effectively through constant interaction. It helps in improving the quality of the services and reduces the cost of production considerably.

Business Process Re-engineering (BPR): Hospitals can use Business Process Re-engineering as a way to respond to environmental pressures to increase productivity and to cut costs. BPR emphasizes on the fundamental rethinking. BPR involves a total redesign of operations by analyzing jobs and critical questioning like 'How can this work be done most efficiently?';, rather than modifying current work procedures, the re-engineering process begins with a clean slate and plans the job from beginning to end. BPR starts with top management's rethinking of the basic mission of the organization. This provides direction for the re-engineering effort.

Bench Marking: Bench marking is the process of comparing work and service methods against the best practices and outcomes for the purpose of identifying changes that will result in higher quality output. Bench marking incorporates the use of human resources techniques such as goal setting to set targets that are pursued, identified and then used as a basis for future action. the bench marking process involves looking both inside and outside the organization for ways of improving operations. Bench marking helps in creating a need for change by showing the organization how procedures and work assignments should be altered and resources reallocated.

Empowerment: Empowerment is the authority to make decisions within one's assigned duties without getting approval from anyone else. Two characteristics make the concept of empowerment unique. One is that the personnel are encouraged to use their initiative and the second is that employees are given authority and resources, so that they are able to make a decision and ensure that it is implemented. Participation, innovation, access to information, and accountability are the basic conditions necessary for empowerment to become operational and a part of organizational culture. Empowerment assumes that employees are willing to improve their daily work process and are competent enough.

Strategies to strengthen the external marketing

Product, place, price promotion, people, physical evidence and process are the important aspects to be

covered in external marketing. By using the information taken from research and analysis one has to decide what the product should be. The main products of hospitals are medical services. The nature of the hospital, the changes in environmental conditions, technology and global competition govern the product mix of a hospital. After developing the initial product description, one has to identify the positioning strategy. It is describing the product in terms of each target group of patients. Sometimes the product will be the same but the way it is positioned may be different. It is essential that the decision-makers give weight to the factors influencing the medical care, medical education, and training and research facilities. While formulating product mix one has to give importance to the task of satisfying the users. The marketing strategies should satisfy the users with the help of refined services.

Location of a hospital is another crucial decision to be taken by the administrator. It should have neat and clean surroundings. In addition, it is also important that the policy-makers should make all possible efforts for the beautification of the surroundings and premises. While selecting a suitable site for the location of the hospital, the management should be careful to the availability of infrastructural facilities like the transportation, communication, electricity etc. The place should improve the quality of services. The financial involvement on the beautification of premises and surroundings is nominal but its impact on the hospital output is of high magnitude. The hospital authorities have to give due weightage to disposal of wastages, as this plays vital role in maintaining cleanliness in the premises. The pricing decision should be market-driven. The hospital must first determine its own costs for delivering services. This market-driven pricing should be compared with the competitors pricing structure. Research helps in determining the pricing sensitivity. The hospital must aim at pricing the services in tune with the paying capacity of the population. If the strategy is welfare oriented, the task of satisfying the users is also simple. But satisfaction too depends on sophistication and sophistication in turn depends on pricing. Hence, pricing should be fixed on sound lines basing on socio-economic factors of the target group.

In addition to the positioning strategies developed for each target group, specific promotional strategies also should be developed. The main purpose of promotional strategy is to convince the target group and compete with similar institutions. Promotion can be both personal and impersonal. Personal promotion can be person to person whereas impersonal promotion can be through advertising, publicity and sales promotion. Advertising is important to contract avenues for a multiplication in the number of users of the services. In promotional activities, there is great need for creativity, sensitivity and accessibility. It is also important that, through promotional strategies the general masses should get information regarding the treatment facilities which are available in

the hospital. Another promotional strategy is providing health care packages for a fixed price to fast-growing health conscious customers. Still another strategy is achieved through regular means, which includes word of mouth publicity. Hospitals can adopt insurance tie-ups with insurance companies. Yet another strategy is to publish magazines, which give information about various services. Hospitals can arrange frequent public lectures, seminars and workshops to spread awareness about health care. As a promotional strategy hospitals can adopt master check-up at reasonable prices. The prices should depend on economic levels of the population and should attract the general masses. People play a very important role in marketing of hospital services. Processes add value to customer and also improve the efficiency of the operations of the hospitals. Physical evidence can be provided using a good layout and maintain hygiene. Supplementary services also help in providing physical evidence to customers. Process of a hospital is to be planned in such a way that the distance between service provider and the new consumer should be minimum.

Conclusion

Though the service sector is gaining prominence in terms of its dominant role at the national level as an important contributor to the GDP, much thought has not yet been given by the academic in terms of introducing latest management techniques, more importantly marketing strategies, towards improving its effectiveness and efficiency. Hospital Services are not exceptional. Whether the hospital is large or small it should deal with a facility wide marketing plan. Marketing of hospital services is needed to educate large numbers of people. There is a need for marketing the hospital services in order to provide the right kind of information and education and to cure the ailments of the patients in the best possible manner. For a successful marketing of services, it is essential that the concerned organization is professionally sound. This helps the hospital in many ways, such as an increase in the organizational potential to show excellence, a strong base for serving the poorer sections and a favorable nexus for making it an on-going process. The first and foremost task before a marketer is to satisfy the users by making available to them the quality services. One cannot deny the fact that in the medicare services in addition to the medical aid, a number of other factors also play a significant role. If the doctors and nurses are found soft, sympathetic, and decent to the patients, the time-lag for curing a patient is minimized fantastically. In the Indian perspective, the core medical personnel lack this dimension. By marketing medicare services, we engineer a strong foundation for both, that is the best possible medical aid and a personal touch-in-service. By marketing medical services, one can make available the Medicare services to the users in

such a way that they get quality services at the reasonable fee structure. This paper has tried to discuss relevant tools which are helpful for strengthening the internal as well as external marketing and suitable promotional activities to the hospital sector. It is presumed the fact that these concepts go a long way in improving the overall effectiveness of the hospital industry. Good Marketing Programme will build up more awareness among the public, create loyalty, and establish a kind of tie-up with potential customers. Thus it may be concluded that application of marketing principles in the Indian hospitals cannot be ignored or delayed any longer.

REFERENCES

- Anne ST, Sushil SN, Amy YO (2007). Cross-National, Cross-Cultural Organizational Behavior Research: Advances, Gaps, and Recommendations. *J. Manage.* 33:p.426.
- Burger PC, Malhotra Naresh K (1991). Product Line Management In Hospitals; An Exploratory Study Of Managing Change, *J. Health Care Market.* 11(3):82. p.1/4.
- Christopher L Corbina, Scott W Kelley, Richard W Schwartz (2001). Concepts In Service Marketing For Healthcare Professionals *Am. J. Surgery* 181:1-7.
- Erdem AS, Harrison-Walker JL (2006). The Role of the Internet in Physician-Patient Relationships: The Issue of Trust, *by Business Horizons* 49:387-393.
- Dean FE, Christopher H (1985). Case-Mix specialization in the market for hospital services. *Health Serv. Res.* 25(5):757-783.
- James E Gmnig, Larissa A Gmnz (1991). Conceptual Differences In Public Relations And Marketing: The Case Of Health-Care Organizations *Public Relat. Rev.* 17(3):257-278.
- Kyung HK, Kang SK, Dong YK, Jong HK, Suk HK (2008). Brand equity in hospital marketing. *J. Bus. Res.* 61:75-82.
- Laing AW, McKee L (2000). "Structuring the Marketing Function in Professional Service Organisations", *Eur. J. Market.* 34(5/6):576-597.
- Leonard B, Kent S (2008). Management Lessons from Mayo Clinic: Inside One of the World's Most Admired Service Organizations. Hardcover, 276pp.
- Marie-Odile R, Jean-Charles C, Zhiyong Y, Sanjay P (2010). A proposed model of online consumer behavior: Assessing the role of gender. *J. Bus. Res.* 63:926-934.
- Menon MKG, Janelle M, Wayne RJ (2006). Assessing Advertising Content In A Hospital Advertising Campaign: An Application of Puto and wells measure of informational and transformational advertising content, *J. Hosp. Market. Public Relat.* 17(1):27-44.
- Michael RB, Joumri of HMMI C, Mirt Mng (1987). Developing New Services For Hospitals: A Suggested Model. 7:2
- Naidu GM, Klemenhager; Pillari; George D (1993). Is Product-Line Management Appropriate For Your Health Care Activity, *J. health care marketing fall* 13(6-17):12.
- Sreenivas T, Srinivasarao B, Srinivasa Rao U (2013). An analysis on marketing mix in hospitals. *Int. J. Adv. Res. Manage. Soc. Sci.* 2(4):187-207.
- Tudor and Kanth (1994). Hospital Advertising: The Influence of Perceptual and Demographic Factors on Consumer Dispositions, *J. Health Care Market.* 14(4):51-51, 1/4p.
- Wilbur S, Jame MD (1982). Identifying Market Segments Within A Health Care Delivery System: A Two Stage Methodology, *Wilbur J. Health Care Market.* 2(3):10.
- Wan-I Lee, Bih-Yaw Shih, Yi-Shun Chung (2013). The Exploration Of Consumers' Behavior In Choosing Hospital By The Application Of Neural Network
- Weng H-C (2006). Consumer Empowerment Behavior and Hospital Choice *Health Care Manage. Rev.* 31(3):197-204.
- Zallocco RL (1993). Is There A Link Between Hospital Profit And Quality?, *J. Health Care Market.* 13(1):68.