Chapter 1
Methodology of Research

1.0 Introduction

1.1 Flourishing Hospital Services Market in India

The hospital services industry represents one of the most money spinning sector of the Indian healthcare (Pharmaceutical and Hospital industry and Medical equipment manufacturing industry). The different indicators such as increasing prevalence of diseases, improving affordability or ease of payment healthcare services and inception of health insurance / third party administrators continue to fuel growth in the Indian hospital industry. With continuous increase in demand, the industry is expected to grow to 8% in 2009 over the previous year.

The Indian hospital service industry is projected to grow at a CAGR of more than 9% during 2010-2015. Presently, the healthcare industry is dominated by unorganized investors, and this is likely to continue in near future as well. Besides, high private sector / corporate investments will contribute significantly to the development of hospital industry, which will lead to becoming stand alone corporate hospitals or chain of
corporate hospitals and will invite more and more number of medical tourists and open doors for medical tourism industry booming in the country.

Besides it is also found that there is a strong demand for hospital beds in the country and a major part of this demand originate from rural and suburban areas. We anticipate that most of this demand will be met by private investments as majority of government investments will be focused on primary healthcare segment. It has been found that the government or the local municipal corporations sanction additional FSI to the hospitals with the promise made by the hospital authorities that they will have additional beds for below poverty line patients with respect to the grant of additional FSI by the Municipal Corporation. To what extent is this fulfilled? Below Poverty Line people have to access healthcare facilities by paying for the relevant amount as per the billing.

With the growth of urbanization a change in infrastructural facilities become inevitable. Urbanization is not merely adding to population and extending in terms of geographical coverage but it is more than that. Urbanization has also strong and direct impact on quality of infrastructure, environment, facilities and amenities to be provided to the citizens. It always adds to the stress and burden of the
administrators when the cities and township expands. Infrastructural development has many dimensions.

However, no city grows by just adding funds for its infrastructural development; it requires sizeable number of quality inputs in terms of skilled manpower facilities, inputs like water, power, banking, insurance services, transportation, communication and entertainment.

A healthy individual or organization is more likely to survive the attack of disease or infection. It is ironical that quite a large number of hospitals who deliver health are unhealthy themselves.

Health is synonymous with verve and strength. There are ways to identify the indicators that point towards the hospital health status whether good or bad of a hospital. Simply when one goes for self or for the relative’s health check up.

Hospitals like any other sector have started moving from mass advertising to targeted direct marketing. Hospitals have become very competitive. How does Hospital make sure prospective patients come to their Hospital? What are the various indicators that decide which hospital treatment needs to be taken. Earlier Doctors used to be the target of marketing but has changed to “direct to consumer”. Hospitals
are developing “customer outreach” databases and are using traditional direct marketing techniques. Conducting Free Health Camps within Society or within the hospital Premises. Different offers, creative and techniques are used in direct mail to attract prospective Patients to the Hospital for availing the hospital services.

Healthcare Industry has either the same or somewhat similar goals as compared to other consumer marketing companies

Healthcare sector is no different than consumer/ FMCG or Pharmaceutical driven companies such as BMG, Time, Inc., Boardroom, Pfizer, or Chase, etc.

The business acronyms may be different but the goals are the same.

• Patient acquisition: How to get more patients coming to the respective hospital premise for taking a specific healthcare treatment?
• Patient retention: How we get the same set of patients to continue to use the same hospital services be it for self or be it for the patient’s relatives and friends?
• Patient “win back”: How to ensure to bring back patients who haven’t used hospital services for some period of time?
New Movers: How to attract prospective patients in hospital premises? These are those sets of patients who have not even used the hospital services even once

1.2 Problem Statement:

With the growth of urbanization a change in infrastructural facilities become inevitable. Urbanization is not merely adding to population and extending in terms of geographical coverage but it is more than that. Urbanization has also strong and direct impact on quality of infrastructure, environment, facilities and amenities to be provided to the citizens. It always adds to the stress and burden of the administrators when the cities and township expands. Infrastructural development has many dimensions.

However, no city grows by just adding funds for its infrastructural development; it requires sizeable number of quality inputs in terms of skilled manpower facilities, inputs like water, power, banking, insurance services, transportation, communication and entertainment.

Healthcare is one of the major components that decides urban infrastructure. Health of the city is decided by quality of healthcare services available. Hence, development of high quality healthcare facilities is one of the most essential aspects that decide the quality of
urban development. Pune happens to be a rapidly growing mega city which soon shall acquire the status of a metro with high cultural, social and economic background. The city cannot maintain its status of metro unless and until it improves itself in terms of healthcare facilities and infrastructure.

Hence the researcher intends to study what are the issues and challenges involved in offering quality healthcare services to the citizens? Do the hospitals stand to the norms of high quality on parameters of customer relationship management, hence, a topic titled Marketing of Healthcare Services in Pune City: Implications on Customer Relationship Management.

1.3 Relevance of the Study:

Marketing Value Chain has to be:

- Compelling Value Proposition in terms of Cost, benefit, Relevant and should be timely driven.
- One should Determine communications channels efficiently and also ensure appropriate target demographic
- Work back time lines by ensuring sufficient timeline is given to Advertising and other promotional input designing and printing.
ensuring there is proper staff training who will be directly or indirectly involved in the creation of the marketing value proposition.

- Event coordination comprising of all those again who will be participating need to be apprised of the Objective of the event, the modus operandi of the entire event, committees formed who would lead a particular set of activities under him or her. Biggest of the event or campaign if not implemented in a well organized manner can turn out to be a disaster. Smallest campaign or event well managed or organized turns out to be a grand hit.

- Creative’s planning and implementation: By may be providing compelling offers like for example if husband avails health check up, wife gets a free health check up or vice versa or could also be applicable in case of mother health check up child can avail free facility. By getting attention of all the targeted people may be by organizing road shows or free health check up camps within the target audience premise.

- Extended dates and times: Hospitals can think of keeping their OPDs and other diagnostics departments open on holidays, keep early mornings to attract may be the working professionals or extending the working hours during weekends to accommodate
these working professionals who otherwise have to take off from their work place

- **Operations planning**: Routine modus operandi in each of the departments should be meticulously done. There needs to be a process owner who does a thorough coordination with all the departments, the call centre and ensuring ease of work by visiting the sites as well physically. Ensuring proper planning is done prior to start of the work and tracking the plan is very very important.

Responding to demand variations is a challenging problem in the marketing of services. This problem is predominantly difficult in the delivery of health care, as it requires a complex network of facilities, equipment and trained personnel.

**1.4 Objectives of the Study:**

The major purpose of the study is to examine what are the areas where healthcare service industry falls short to the expectations of the patients (users/customers). It also attempts to know what measures can be suggested to improve upon the parameters of quality and strengthen the healthcare infrastructure in the city.

Hence the major objectives of the study can be presented as follows:
1) To analyze the present status of healthcare industry in the city on select parameters and quality.

2) To examine the type of facilities and amenities provided by the hospitals to the patients.

3) To study the customers response to the existing healthcare services and identify the extent of need gap in terms of expectation and availability of services.

4) To study the reasons for shortcomings in enhancing the quality of services

5) To suggest a suitable model for developing a user friendly quality enhanced healthcare service model for hospitals in Pune City

**Justification of the Objectives:**

The set of objectives selected for the study indicate clearly that the thrust area of the study is related with 3 basic aspects of healthcare industry. These are:

Study of healthcare industry in Pune, expectation of patients (users/customers) and the extent of gap between expectation of patients and availability of services in terms of quality, utility, cost and time utility.
Hence to justify the objectives, the researcher has accepted the following presumptions as Hypotheses.

- It is believed that there is a need to enhance the quality of healthcare services presently offered by the hospitals in the city of Pune.

- It also presumed that the expectations of the customers regarding healthcare services are not fulfilled on the parameters of quality, cost of time utility and patient – hospital relationship.

- It is also accepted that the level of satisfaction derived from healthcare services by the users is low and can be enhanced by improving relationship with the patient (users/customers) by the hospital.

<table>
<thead>
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<th>Parameters Selected for the Study</th>
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<tbody>
<tr>
<td>Utility</td>
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<td>Cost</td>
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<td>Place</td>
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<td>Frequency of Usage</td>
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<td>Nature of Requirement</td>
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Hence, Parameters selected for the study:

Utility: Healthcare services have a high time utility dimension. Healthcare Services encompasses entire gamut of treatment and hospitality. It ranges from OPD to Daycare to inpatient department.
Inpatient department can range from a day stay to an average length of 5 days stay.

Cost: There is a direct relationship between cost and availing the facility. Facility ranges from OPD services to Inpatient facility. Again every hospital has range of rooms’ eg general ward, Semi private, private, VIP and suite rooms. The rooms are selected based on the choice of the patient and of course their paying capacity or the type of premium they

Place: Hospital services have to be provided considering specific expectation and requirements of the patients in a particular place or location

Frequency of Usage: Depending on the patients specific requirement the frequency of availing healthcare facilities varies

Nature of requirement: In certain cases emergency of treatment decides the

Utility of the services.

Staff-patient relationship: There is a direct implication of Staff-patient relationship on usage and availing of services
Doctor-Patient relationship: Doctors play the role of counselor, guide, and healer and also as an advisor.

Physical Infrastructure: It decides the congeniality of the systems and its impact on patient morale.

Amenities and facilities: It has a direct bearing on psychological set-up of the patient.

Technical Infrastructure: The quality of this infrastructure decides the type and quality of services made available to the patients.

1.5 The study has a territorial universe of Pune City with 76 hospitals of which 68 hospitals have been considered for the study.

The study covers multispecialty hospitals as hospitals registered as limited companies, government hospitals as well as established as trust and societies.

The researcher has selected a sample of 68 hospitals and 1136 sample size using Krejcie and Morgan’s Table. However, care has been taken to include a variety of hospitals providing different specialty and other expert services to the patients. Data regarding customers’ response to facilities and services available with different hospitals to be collected. It
will also help to know what is the response and opinion of customers regarding quality of healthcare services.

The study will help analyze and identify tendencies of statistical behavior of data and establish a pattern of quantitative change on select parameters. To establish relationship between select parameters like price and satisfaction, place utility and satisfaction, customer-service provider relationship and level of satisfaction.

Various study related data will be collected from various Government published Information. Patients’ feedback forms. Regulations of Government imposed and other hospital management related journals. Various websites

The hospital services and the impact of the same on Customer relationship management needs to be seen, which in true life is not a good picture. Through proper survey this needs to be identified so that hospitals services can have a very positive impact on strong customer relationship management.

Although health care organizations have implemented a number of healthcare services marketing strategies, little is known about their use
or the impact that they have on satisfaction and performance – this research aims at addressing this gap.

The overall study thus aims at identifying the need gap between the Patients and the services provided by the service providers. Thereby ensuring right treatment to the patients at the right place and make sure patients’ morale is boosted.

1.6 Understanding Key Terms

Footfalls in terms of Patient number

The number of patients in a particular hospital depends on various factors such as: Hospital infrastructure, Doctors treatment success rate, The courtesy or personality of the serving staff eg. Nurses or the resident doctors, the treatment given by the security guards as well play a very important in deciding the treatment to a particular hospital. The food being served, place for the relative stay, the number of services departments available because most people prefer visiting those hospitals which are multi specialty in nature. For the elite class they also look into the parking space available to park their four wheelers which is a herculean task these days. Response time to bell rung by the patient, good hearing by the Doctor, Cleanliness of the hospital, easy availability
of medicines, acceptance of the insurance that the respective patient has procured so that cashless facility can be availed. All these if satisfied by the hospital to the patient or patient relative, if not all atleast a portion of it if weighed by other hospitals proves fruitful, the number of patients increases in those hospital.

This goes without saying that if you have enough people who trust you for treating, and then you are in business. The required patient flow for breaking even must be there.

**Staff Self - Esteem**

A healthy hospital has highly inspired staff. People are willing to go that extra mile even if they are not paid extra for it. The staff attrition rates are lower than industry levels. It is not difficult to find a nurse or a driver who has been working there for many years. The boosting of morale depends much upon the immediate boss. The way learning opportunity is being provided by the immediate superior, recommendation for promotion if the job is truly exemplary compared to others in the department, or rewarding in some way or the other boost the performance of the employees which automatically gets noticed in their
behavior with the patients, their colleagues, superiors, or the patient's relative.

If the management feels that it has nothing to do with staff matters and it is the HR department's job to manage the 'staff or the menial workers', it is a bad prophecy. The annoyance of our Healthcare industry is that though our healthcare services are delivered through human beings, most of the top managements are more bothered about the latest machines and gadgets to leverage their competitive position. Eg. Initially there was just a X–ray machine, then came up gradation in CT MRI then Pet Scan, now newer and newer version of the Pet scans / CT scans are coming up making the machines obsolete in a very short span. To meet the competitors status people are investing in these newer machines increasing the cost to the patients so as to recover the money or the depreciation. Thereby overall increasing the cost of the healthcare services being provided be it the rich or the below poverty line people.

**Walk-in Patients (without any referral from General Practitioner)**

This is one of the most important parameter. If the hospital is dependent on referrals that arise through General Practitioners who are paid referral fees, it is a red alert for them. Too many hospitals are like poor
Indian farmers, relying on the monsoon for a good crop. Little do they visualise about what happens when some other hospital decides to pay a five per cent higher referral fees to the same General Practitioners. Whether this is ethical or unethical this is not a matter of debate. Any given business it is not wise to be depended upon others to attract / get customers. With the increase in the referral fees system across the country, how can we now place these doctors next to God. How can we get our ourselves to respect them? With the concept of family doctors also diminishing who otherwise were like a part of the family. With the referral system increasing in the country, has posed tremendous threat the hospital running overall. As with new hospitals coming up and why not even the existing hospitals besides increasing the cuts may attract these General Practitioners with some freebies apart from monetary fronts which could be holiday package, Free medical treatment for the Family members or some other promotional gifts. This will put the hospital into tremendous trouble who has invested heavily in the high technology gadgets and machines and equipments. How will they then recover the operating cost as well if no patients are then referred by the General Practitioners?
On the other hand, direct walk-in patients in OPD or inpatient department mean a healthy brand value for any hospital. This means the hospital is trusted. Hospital is then said to be self reliant. Monsoon or no-monsoon, you are more likely to reap a rich crop every now or then. One should try and understand the various aspects related to it. Is it the proximity to the residence, because may be the relatives would prefer their ease in meeting may be the household chores with their responsibility of meeting the patients or rather attend to the ailing person by getting home made food or attending the kids with this responsibility as well. It could be the Doctor's success rate in treating the family members, relatives or the neighbours that entices them to avail the said hospital facility. It could simply mean the staff's courtesy or the number of treating doctors for various specialty might attract them coming to a particular hospital. Such patients continue to avail facility till they do not experience some harsh facts of that particular hospital and keep them in their good books.

**Patients Re-visiting the same hospital for treatment**

A healthy sign for any hospital is the percentage of people who keep their repeat appointment with the doctor. Far too many patients wander away into oblivion without the hospital ever noticing it. Many a times a
patient has been given an admission date for getting operated. Does anyone measure what percentage of times the patient actually gets admitted?

Those patients who are relatively happy with the hospital services or are delighted by the hospital services pay a revisit to that particular hospital in case of any medical treatment that may be desired. It could be the cost of the treatment or the other indicators as mentioned above that might have lead to the patients revisit the hospital. At times if hospitals maintains the records of the patient for a monthly OPD say for checking the diabetic status of a patient the follow up reminder given by the hospital to the patient makes it a compulsion for the patient to visit the hospital and avail the treatment. Another very solid example is: say a patient undergoes a valve replacement, and a well known fact is that after a period of maximum 10 years the valve needs to be replaced. If this is kept in mind, record placed or kept in an organized manner, proper chart created for following up with these patients. The patient here feels the caring and compassionate nature of the hospital or the concerned Doctor in the hospital or simply the operator or nurse who has given the reminder call to the patient that makes the patient feel elated. But how many of the hospitals have actually gone in for this kind
of marketing, wherein caring, compassionate nature of the hospital or the doctor is depicted in every action. Simply just a smile from any of the hospital employees including the doctors or the nurses might attract the patients to revisit the hospital for the treatment. This needs to be understood by the management rather than investing loads of money in latest gadgets and more money needs to be invested in the employees training and development programmes that will not just prove to be a stress buster for them but will create a sense of belongingness to the hospital which will automatically reflect in their dealing with the patients or the patients relatives. Thereby increasing patient footfall for the hospitals. Increase in patient footfall means increase in the hospital revenue and profitability which certainly will have a positive impact on the employees as well.

Value Proposition

Have the hospitals identified the following for themselves?

What is it that they have and others don’t, maybe something that will attract patients or their relatives coming to the hospital. Would it be simply meals being provided but that too based on say if a Jain patient comes Jain meals is served or specific non veg hard core non veg eaters?
What makes them distinct? Is it that every year there is a follow up from the hospital or the doctor’s side regarding how is the health of the patient after leaving the hospital so as to remind him or her to avail the hospital services when required be it for the patient or their near or dear ones. What is the unique value you add to your patients which others don’t? Hospital need to retrospect themselves and find the ground reality truth what is it that it not attracting the patients to the hospitals? If the management struggles to answer these questions, they have caught a symptom which may point to a serious trouble. Yes, we all know that healthcare is a supplier's market. There are too few hospitals for too many people. However, the scenario is fast changing. The ratios are not the same in big cities. If I have an insurance card and I live in Delhi and I need a heart surgery, I have a list of options. There is Fortis Escorts, Max, Apollo and a number of other players. It is very well said — if hospitals are not distinct, they may soon be extinct. What really in marketing services will impact Customer Relation Management needs to be studied through the research work. Of course the innumerable indicators will have to be studied and narrowed down to bear minimum that actually forms the crux of the Customer relationship Management and will help in actually studying the impact of healthcare services marketing on the customer relationship Management.
**Working Capital (cash in hand)**

Here you go there you go wherever you may go to seek hospital treatment you will find a separate insurance or Third Party Administrators’ desk ready to process the claim. There has been a steep rise in this kind of transaction. Means the TPA or the insurer takes a certain amount of yearly premium from the beneficiaries with an assurance of providing hospitalization to any hospital tied under that particular TPA and also promises to provide cashless hospitalization. But there is a catch may or may not the entire amount will be borne by the TPA. Payment entirely depends on number conditions: Doctors diagnosis, the premium slab that the patient falls under, whether the said diagnosis by the doctor pre-existed, the patient wishes to take up the treatment may be in the Private room when he is eligible for a class lower than that opted for. Insurance on the other hand is not a cashless facility. The patient bears the entire amount and sends the bills and other claim papers to the insurer for may be total or partial reimbursement. But the Insurance and TPAs are the need of the day. Besides there are some hospitals who perform these activities of cashless facility service very smoothly whereas others have a very lethargic way of carrying out the activity of reimbursement to the
patients or getting simple approval letter fax from the TPAs. This also decides whether the hospital services need to be availed in case need arises in the long run. Proper trained manpower, matured employees needs to be stationed to tackle the agitated patients relatives who are already under stress and queue up for getting their TPA papers process done. At times leads to a heated argument wherein the fault of none of them actually exist in reality. Hospital expenses happen today and they get paid for that today’s work 45 days later. Many hospitals are feeling the heat. Working capital is in short supply. Revenue cycle has to work in Hospital favour. If the finance manager is seen fire-fighting to meet the day-to-day expenses, hospital can be assured that the health of the hospital is in jeopardy.

**Inventory Levels (Pharmacy/ Pathology/ Operation Theatre)**

Now let us try and understand the working of the pharmacy or the drug store. There exist very strong and cordial relations between the hospitals and the pharmaceutical companies. Once the offer of discount or cash discount or free units on purchase of particular quantity is announced the pharmacist or the purchaser swings in thinking it can add to the pharmacy revenue for the hospital. At times huge quantity is ordered such that patients are not allowed to get medicines from outside and are
forced to purchase medicines from the hospital drug store only. They do so that hospital strategy of earning profit out of medicines is not left.

Stock piling is a habit which is more common than it seems. Sometimes stock is then gathering dust for many months in the warehouse or in the pharmacy. Besides the pharmacy the same holds true for the laboratory reagents, Operation Theatre consumables and other areas directly or indirectly related to the operation theatre or the Pathology Laboratory. Therefore, it is important to ascertain the daily/weekly/monthly usage and re-order levels for hospital stock keeping units. This helps in fighting the cash crunch discussed in the previous point and restores health back of the hospital. Does that also mean the patients should be allowed to procure the medicines from outside the hospitals where they might be getting huge discounts if purchased directly from the stockist? Point to be debated upon. Will this add to customer relationship management? Just for this small restriction from hospital side will the patient still prefer coming to the hospital needs to be understood? Once again this too needs to be understood as an indicator whether it has an impact on Customer Relationship Management.
Consultant (Visiting Doctors)

Today's Hospitals operate or run the hospital more so on the visiting doctors rather than the Full time Doctors. This needs to be first looked at whether it is a boon or a pain for the hospitals. Just as every coin has two sides, so does this indicator as well. A full time doctor as regards to the boon side is always advisable to reach out to the ailing patient in times of health crisis of the patient. The patient feels that he or she is in safe hands. Doctor's presence gives a more formal environment for the smooth hospital operation to take place. In case an heated argument arises in the hospital between the patient and the hospital staff, mere presence of the doctor settles the patient or the patient's relative and the hospital staff faster, and puts an end to the problem faced or experienced by either party. Here the doctor is not meant by the resident medical officer but a consultant, the specialist.

Most hospitals have visiting doctors who operate for a fee. It is a great model if hospital thinks in terms of reducing the hospital fixed costs. On the flip side, however, this model is found wanting when we talk about the commitment levels of these doctors to fulfilling the vision of the hospital. They are working for themselves and there are no problems with that. What creates problem with though, is the ignorance of the
hospital promoters. They seldom make any efforts to align the visiting doctors to the value system and vision of the hospital. Worse still, they themselves may not be aligned to the purpose of the organization’s existence. It is amazing to see how many CEOs cannot spell out the vision statement that keeps on hanging on the walls all the time. Why blame the visiting doctors in that case. Ask how many employees of the hospital are aware of the vision and mission statement. Unless some kind of accreditation process is due or the hospital is undergoing all the staff members who are directly or indirectly involved in laying down the processes or are likely to meet the auditors coming for hospital scrutiny would know of all these Vision, Mission, Core Values and the Quality policies of the hospital. So in this case hospitals’ stakeholders should first ensure that the Vision, mission, Core Values and the Quality policies should be rattled off by the employees, ensure its implementation in every moment of their presence in the hospital premise. This will automatically or by default get the visiting doctors aligned to the respective hospitals Vision, Mission, Core Values and the Quality policies. Thereby this will serve as one more indicators for hospital services marketing and its impact on customer Relationship Management.
**Equipment/ Facility Utilization**

Many areas or equipment are under-utilized in most of the hospitals. A hospital is said to be healthy when there is optimum utilization of resources. If there a lot number of areas or equipments that are not in use or under used, hospitals stakeholders should know it is not a healthy sign at all. There could be again a number of reasons to this effect. Could be due to less manpower to operate the equipment or could be skilled manpower not available to operate the high technology equipment or could be there are less number of patients be it outdoor or inpatients to for the utilization of that particular equipment.

Besides, one of the major reasons could also be as to why the equipments are under utilized in hospitals is that hospitals widen their scope too much. They want to do everything for everyone. This leaves a lot of scope for many specialties not doing well. Here is the mantra—the wider you stretch yourself, the weaker you become. It usually works better to do a few things and do them well. Besides for the innumerable treatment marketed, experts or consultants are rare. Success rates decline and the demand for that particular specialty declines automatically and is faced out.
Another example to this effect could be that of various levels of rooms availability. Presidential Suite, Super Deluxe, Deluxe, Private, Semi Private and General ward for male and female apart from Child ward. Hospitals need to make a thorough study of the target audience or the patients that are likely to visit the hospitals to avail the facility for a particular specialty. If the hospital say is in the middle class locality will the middle class families be in a position to avail presidential Suite rooms or as a matter even Super Deluxe, Deluxe or Private rooms. Then why create a facility that will remain under utilized or unused. Rather create more of Semi private and increase the General ward size. Vice versa is also applicable, those hospitals which are located in the posh locality the reverse will be applicable ie. Less of general wards and more of Presidential Suite or Super Deluxe, Deluxe or Private rooms to cater to the locality based target audience or patients. Underutilized or unused facility adds to or increases the overheads. Break even is difficult to be achieved. By the time break even may touch the equipment may also become obsolete.

**Cost of Healthcare service:**

With the increase in room standard the rates of the overall healthcare treatment increases multifold. Despite the doctor remaining the same,
the medicines remaining the same, the consumables remaining the same. The only change one can see is the luxury that differs. Attached wash room, Sleeping bed available for the patient relative, presence of AC in upper standard rooms, much higher standard rooms would provide a separate pantry area, In room TV , Depending on the standard of the room again availability of fridge or the microwave or the cooking range or simply a free internet facility could be provided. To add to this daily newspaper service at doorstep could be provided. All this adds up to the Cost of healthcare services. With installation of high technology equipments and to recover the cost again the diagnosis or the treatment cost is increased multifold. How can a common man without insurance or cashless facility afford the corporate or the private hospital service / treatment charges?

**Proximity to residence:**

Provided hospitals market themselves to the best possible extent and talk of their success rates do people having proximity to the hospital avail the facility for all types of treatment or just in case of emergency. Patients despite staying close by to the hospital will they prefer availing the facility even if the infrastructure is or not up to the mark, Doctors success rate is or not good or may be just that the doctor is not known in
that particular specialization for which services are to be availed. May be if there is an emergency patients might be taken to the hospital for immediately settling the critical condition of the patient and may be then shifting to the hospital where they have immense faith. Is it so happening? Or overall patients and relatives prefer proximity to residence and overlook the infrastructure, Doctors success rate, staff, cost of the hospital services or are those hospitals not up to the mark become a stop gap arrangement? What are the flaws? Can they rectify and reinstall faith in the people.

1.7 Hypotheses

Statement of Hypotheses:

The set of objectives selected for the study indicate clearly that the thrust area of the study is related with 3 basic aspects of healthcare industry. These are:

Study of healthcare industry in Pune, expectation of patients (users/customers) and the extent of gap between expectation of patients and availability of services in terms of quality, utility, cost and time utility.
Hence to justify the objectives, the researcher has accepted the following presumptions as Hypotheses.

H1: It is believed that there is a need to enhance the quality of healthcare services presently offered by the hospitals in the city of Pune.

H2: It also presumed that the expectations of the customers regarding healthcare services are not fulfilled on the parameters of quality, cost of time utility and patient – hospital relationship.

H3: It is also accepted that the level of satisfaction derived from healthcare services by the users is low and can be enhanced by improving relationship with the patient (users/customers) by the hospital.

**Justification of Statement of Hypotheses**

**Truth prevails, Prevention, is better than cure.**

Healthcare is one of the major components that decides urban infrastructure. Health of the city is decided by quality of healthcare services available. Hence, development of high quality healthcare facilities is one of the most essential aspects that decide the quality of urban development.
Pune happens to be a rapidly growing mega city which soon shall acquire the status of a metro with high cultural, social status of a metro with high cultural, social and economic background. The city cannot maintain its status of metro unless and until it improves itself in terms of healthcare facilities and infrastructure.

It is suggested understanding customers in terms of their economic importance and then adjusting the marketing approach to reflect the importance of different customer groups according to their existing and potential profitability. Clear segmentation of the customer base and adopting the correct level of segment granularity is an important element of customer strategy it is also a necessary pre-condition before considering the value creation process, as segmentation is crucial to this process.

The value the customer receives from the provider can be determined by developing value propositions and undertaking value assessment. In fact, customers are not buying services, they really buy specific benefits which solve their problem.

Hence the researcher intends to study what are the issues and challenges involved in offering quality healthcare services to the Pune citizens?
Do the hospitals stand by the norms of high quality on parameters of customer relationship management, hence, a topic titled Marketing of Healthcare Services in Pune City: Implications on Customer Relationship Management.

1.8 Scope of the Study

The need for the study of the issues and challenges involved in offering quality healthcare services to the citizens can be rightly justified after considering following points in favour of the research inquiry:

1) In the last decade there has been a significant increase in the number of hospitals established in the city.

2) Pune is upcoming rapidly as a healthcare centre on the map of the country.

3) There is tremendous potential to develop healthcare industry in this region.

4) There is significant absence of professionalism of healthcare services which is required in order to boost the healthcare industry and enhance the quality of healthcare services in the city.

5) There is a significant gap between the expectation of the patients (users/customers) and the quality of services provided by the hospitals (service provider) which needs to be attended.
immediately in order to develop a satisfactory customer relationship network.

**Universe of the Study:**

1) The study has a territorial universe of Pune City.

2) The study shall cover multispecialty hospitals as hospitals registered as limited companies, government hospitals as well as established as trust and societies.

Sample selection:

**Summary of Sample Size**

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<td><strong>Total</strong></td>
<td><strong>68</strong></td>
<td><strong>81600</strong></td>
<td><strong>1136</strong></td>
</tr>
</tbody>
</table>
Method of Sample Selection:

For any research, the sample size of any study must be determined during the designing stage of the study. However, before determining the size of the sample that needed to be drawn from the population, a few factors must be taken into consideration. According to Salant and Dillman (1994), the size of the sample is determined by four factors: (1) how much sampling error can be tolerated; (2) population size; (3) how varied the population is with respect to the characteristics of interest; and (4) the smallest subgroup within the sample for which estimates are needed.

Using the above methods as a guideline, the following section aims to compare two approaches in determining the sample size of a population of 500 people using (a) Krejcie and Morgan (1970) and (b) Cohen Statistical Power Analysis. In this article I wanna explain about Krejcie and Morgan method.

Estimation of sample size in research using Krejcie and Morgan is a commonly employed method. Krejcie and Morgan (1970) used the following formula to determine sampling size:
\[ S = \frac{\chi^2 NP (1-P)}{\chi^2 (N-1)} + \chi^2 P(1-P) \]

\( S \) = required sample size

\( \chi^2 \) = the table value of chi-square for one degree of freedom at the desired confidence level

\( N \) = the population size

\( P \) = the population proportion (assumed to be .50 since this would provide the maximum sample size)

\( d \) = the degree of accuracy expressed as a proportion (.05)

Based on Krejcie and Morgan’s (1970) table for determining sample size, for a given population of 500, a sample size of 217 would be needed to represent a cross section of the population. However, it is important for a researcher to consider whether the sample size is adequate to provide enough accuracy to base decisions on the findings with confidence.

There are various formulas for calculating the required sample size based upon whether the data collected is to be of a categorical or quantitative nature (e.g. is to estimate a proportion or a mean). These formulas require knowledge of the variance or proportion in the population and a determination as to the maximum desirable error, as well as the acceptable Type I error risk (e.g., confidence level).
It is possible to construct a table that suggests the optimal sample size – given a population size, a specific margin of error, and a desired confidence interval. This helps researchers avoid the formulas altogether. The table below presents the results of one set of these calculations. It has been used to determine the appropriate sample size for the study.

Many researchers (and research texts) suggest that the first column within the table should suffice (Confidence Level = 95%, Margin of Error = 5%). To use these values, simply determine the size of the population down the left most column (use the next highest value if you the exact population size is not listed). The value in the next column is the sample size that is required to generate a Margin of Error of ± 5% for any population proportion.

However, a 10% interval may be considered unreasonably large. Should more precision be required (i.e., a smaller, more useful Margin of Error) or greater confidence desired (0.01), the other columns of the table should be employed.
Professional researchers typically set a sample size level of about 500 to optimally estimate a single population parameter (e.g., the proportion of...
likely voters who will vote for a particular candidate). This will construct a 95% confidence interval with a Margin of Error of about ±4.4% (for large populations).

Since there is an inverse relationship between sample size and the Margin of Error, smaller sample sizes will yield larger Margins of Error. For example, a sample size of only 100 will construct a 95% confidence interval with a Margin of Error of almost ±13%, too large a range for estimating the true population proportion with any accuracy.

Note that all of the sample estimates discussed present figures for the largest possible sample size for the desired level of confidence. Should the proportion of the sample with the desired characteristic be substantially different than 50%, then the desired level of accuracy can be established with a smaller sample. However, since you can’t know what this percentage is until you actually ask a sample, it is wisest to assume that it will be 50% and use the listed larger sample size.

The number of sub-groups (or “comparison” groups) is another consideration in the determination of a sufficient sample size. Since the parameter must be measured for each sub-group, the size of the sample for each sub-group must be sufficiently large to permit a reasonable (sufficiently narrow) estimation.
Treat each sub-group as a population and then use the table to determine the recommended sample size for each sub-group. Then use a stratified random sampling technique within each sub-group to select the specific individuals to be included.

Thus, for 53 Private Hospitals (universe) as in this study researcher wanted to sample a sufficient number to generate a 95% confidence interval that predicted the proportion who would be repeat customers within plus or minus 5%, you would need responses from a (random) sample of 48 and of 63600 customers (universe) (53 hospitals*100 patients*12 months) i.e. patients from Private hospitals as in this study and you want to sample a sufficient number to generate a 95% confidence interval that predicted the proportion who would be repeat customers within plus or minus 5%, we need responses from a (random) sample of 387 of all the customers i.e patients in this study.

Thus, for 15 trust Hospitals (universe) as in this study researcher wanted to sample a sufficient number to generate a 95% confidence interval that predicted the proportion who would be repeat customers within plus or minus 5%, you would need responses from a (random) sample of 15 and of 18000 customers (universe) (15
hospitals*100 patients*12 months) i.e. patients from Private hospitals as
in this study and you want to sample a sufficient number to generate a
95% confidence interval that predicted the proportion who would be
repeat customers within plus or minus 5%, we need responses from a
(random) sample of 378 of all the customers i.e patients in this study.

Thus, for, 8 Army and Government Hospitals (universe) as in this study
researcher wanted to sample a sufficient number to generate a 95%
confidence interval that predicted the proportion who would be repeat
customers within plus or minus 5%, you would need responses from a
(random) sample of 8 and of 9600 customers (universe) (8
hospitals*100 patients*12 months) i.e. patients from Private hospitals as
in this study and you want to sample a sufficient number to generate a
95% confidence interval that predicted the proportion who would be
repeat customers within plus or minus 5%, we need responses from a
(random) sample of 371 of all the customers i.e patients in this study.
1.9 Method of Data Collection:

Primary Data Collection:

The researcher has collected primary data by using suitable research instruments description of which is given as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Instrument of Data Collection</th>
<th>Respondent Class</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Questionnaire</td>
<td>Patients</td>
<td>Data collected regarding customers response to facilities and services available with different hospitals. It also helped to know what is the response and opinion of customers regarding quality of healthcare services.</td>
</tr>
</tbody>
</table>

Secondary Data:

a. This data was collected from various Govt. published information

b. Regulations of Government imposed
c. Various hospital management related journals

d. Various websites

**Techniques of Analysis**

The data has been analysed using percentage method in the Excel sheet.

**Utility of the Research**

1) This research helped analyze the present status of healthcare industry in the city on select parameters and quality and will enable the government to take necessary steps in providing ultramodern techniques and suitable and experienced doctors in treating the ailing patients.

2) Helped examine the type of facilities and amenities provided by the hospitals to the patients, thereby will enable the government to take necessary steps in providing ultramodern techniques and suitable and experienced doctors in treating the ailing patients.

3) This study has helped study the customers response to the existing healthcare services and identify the extent of need gap in terms of expectation and availability of services. This will help the existing and future healthcare providers to provide
compassionate and quality healthcare thereby raising the healthcare standards in the Pune city

4) This study has helped bring to light the reasons for shortcomings in enhancing the quality of services

5) This has also helped in realization of a suitable model for developing a user friendly quality enhanced healthcare service model for hospitals in Pune City

1.10 Scheme of the Report

Chapter 1: Methodology of Research

Chapter 2: review of Literature

Chapter 3: History and Development of Healthcare Sector

Chapter 4: Profile of Healthcare Sector in Pune City

Chapter 5: Marketing of Healthcare Services

Chapter 6: Analysis and Interpretation of Data

Chapter 7: Analysis of Responses of Hospitals towards Marketing of Healthcare Services

Chapter 8: Conclusion and Suggestions