



“A COMPARATIVE STUDY ON WAITING TIME IN VARIOUS HOSPITAL DEPARTMENTS AND RECOMMENDATIONS TO DECREASE WAITING TIME”

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CHAPTER -1 INTRODUCTION OF THE STUDY



INTRODUCTION OF THE STUDY

It was discovered that outpatients who attended their scheduled appointments on time and waited no longer than 37 minutes reported feeling reasonably satisfied with the service. The findings of our study are consistent with this observation. In the hospital that was the subject of this study, the waiting time for consultations did not surpass this threshold; nevertheless, the waiting time for prescriptions to be filled considerably above this limit before any improvements were implemented. The pharmacy services were rated lower in overall satisfaction by outpatients. There was an inverse relationship found between the length of time spent waiting and the outpatient

satisfaction levels. When compared to relationships between waiting time for consultations and outpatient satisfaction score towards consulting doctors, those between waiting time for filling prescriptions and outpatient satisfaction score towards pharmacy services were stronger. Patients are inclined to view the filling of a prescription as more of a procedure, which is why time plays such a significant role in their perception of the experience; in contrast, patients have varying expectations regarding the doctor consultation. There have been a number of studies that have shown that the processes that are used in healthcare are important, and that using a process improvement team to evaluate and restructure the patient care system can be an effective way to cut waiting times and increase patient satisfaction. Firstly, a multidisciplinary taskforce that is empowered by the top hospital manager with supreme authority to design interventions, to appraise the performance of the targeted players, and to link the appraisal results with financial penalties is fundamental for quality improvement. This process-improvement approach also requires major sustained support from top-level hospital administrators. Second, they focused on the issue of lengths of time spent waiting, and they defined that issue quite specifically. This made it possible for the interventions to be carried out with definite aims and goals in mind. Thirdly, they recognised the likely cause of the problem, collected and evaluated data linked to the problem, developed remedies to address the root causes of the problem, and received backing from the senior hospital manager in order to ensure their credibility. In the fourth step, they put the proposed solutions to the test by reducing the amount of time spent waiting for consultations and then broadened the test to reduce the amount of time spent waiting for prescriptions to be filled. This ensured the constant progression of the interventions step by step. Fifthly, they reviewed the outcomes, obtained, and examined the data on the solutions, which allowed them to alter the solutions based on evidence. In conclusion, it was demonstrated that the integrated information system is absolutely necessary for carrying out the aforementioned problem-solving procedure effectively.

INTRODUCTION

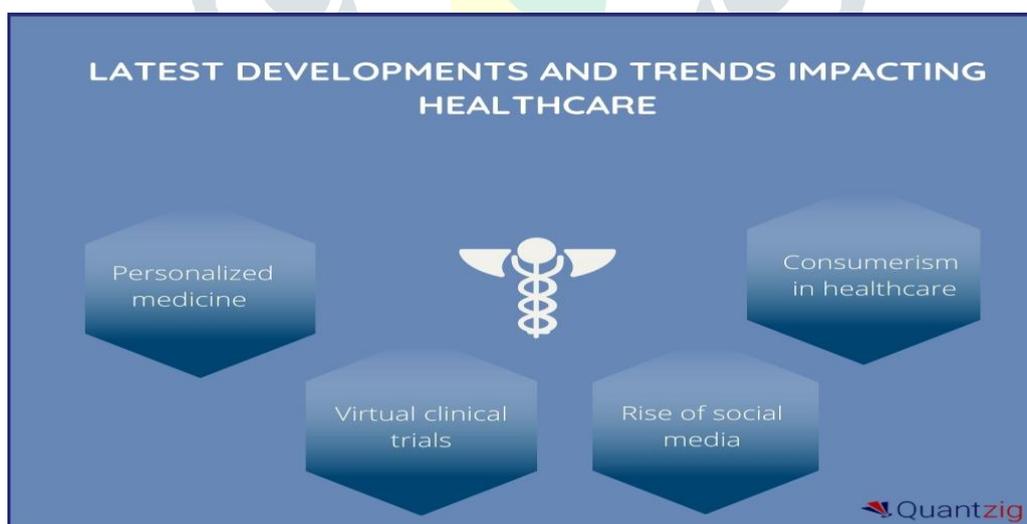
Patients at India's multispecialty hospitals are receiving care that is steadily improving in terms of both the level of care they receive and the level of satisfaction it provides. Wait times in hospitals are an extremely important factor in determining the overall quality of the care provided to patients seeking medical treatment or diagnosis. As a result, this has become a significant component that makes it difficult to please the patients. In order to cut down on the amount of time spent waiting, a variety of techniques and methods are used. The purpose of this study is to investigate the total amount of time that patients spend waiting in OPD across a variety of hospital departments. The goal is to measure the amount of time spent waiting in various departments within OPD, such as transportation, registration, diagnosis, pharmacy, and billing, and then make a recommendation to reduce the amount of time spent waiting.

The outpatient service is considered the best and most significant service that the hospital offers since it is able to assist a greater number of patients for a fee that is more affordable. The length of time patients are required to wait in different departments is a critical aspect that must be taken into consideration to ensure their satisfaction. In most cases, it has been noticed that patients at the hospital outpatient departments (OPDs) are required to wait for an unreasonably extended period of time before they may receive medical treatment or advice from trained healthcare professionals. Patients' unhappiness stems from the lengthy wait times they experience at hospitals.

Long wait times for patients in an outpatient department (OPD) severely hampered the capacity of the hospital to acquire new amplified business in a healthcare system that was reasonably well administered. It is challenging to market services to individual customers who are unhappy with the performance of their respective departments. Wait time is considered to be one of the most important indications of excellence assurance for patients. Therefore, it is undesirable for a hospital as a whole to have excessive waiting times in the outpatient department (OPD).

When hospitals discontinue or reduce the number of clinics they offer, it is a commonly acknowledged practise for patients with clinical priorities to continue to have priority access. An investigation into clinical guidelines is required.

ABOUT THE HEALTHCARE INDUSTRY



ABOUT THE HEALTHCARE INDUSTRY

The healthcare industry is rapidly growing in importance in India, both in terms of revenue and employment opportunities. Hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, medical equipment, and medical insurance are all components of the healthcare industry. Due to improvements in coverage and services, as well as rising expenditures from both public and private companies, the healthcare industry in India is expanding at a rapid rate.

The provision of medical care in India can be broken down into its two primary categories: the public sector and the private sector. The primary emphasis of the public healthcare system in the United States is placed on the provision of primary healthcare facilities in rural regions, with only a few secondary and tertiary care facilities located in major cities. The vast majority of secondary, tertiary, and quaternary care facilities are operated by the private sector, with a strong concentration in metropolitan areas as well as tier-1 and tier-2 cities.

The enormous number of highly-skilled medical personnel that India possesses gives it a significant advantage over other countries. Also, when compared to its counterparts in Asia and western nations in terms of cost competitiveness, India excels. In general, the cost of surgical procedures in India is approximately one-tenth of what they are in the United States or Western Europe.

The multispecialty hospitals in India are continually working to improve the level of care that they provide their patients in order to keep them as patients and keep their satisfaction levels high. Waiting times in hospitals play an important part in whether a patient receives medical treatment or a diagnosis; consequently, this has become one of the most difficult factors to overcome when trying to make patients happy. In order to reduce wait times, a variety of procedures and methods are used. The total amount of time spent waiting by patients throughout all hospital departments, including OPD, Pharmacy, and Laboratories. The purpose of this study is to determine the length of time spent waiting in OPD's various departments, such as transportation, registration, diagnosis, pharmacy, and billing, and then make recommendations to cut down on that length of time. The data for this study was collected using a research method in the form of a survey questionnaire, and then it was analysed.

The results of this study's calculation of the mean waiting time in the OPD for each of the different departments, as well as the result for overall patient satisfaction, can be seen here.

A style of healthcare that is accessible to all people is practised in India. The majority of the administration for this approach is carried out at the state level as opposed to the federal level. According to the Indian Constitution, the provision of a functional healthcare industry is not the duty of the central federal government but rather of the individual state governments. As a result of this, it will be the responsibility of each state to raise the standard of living of its citizens and to promote the health of the general public as part of its core responsibilities. In 1983, the Indian Parliament gave its approval to the National Health Policy, which was subsequently revised in 2002 and then once more in 2017. The four key updates that were provided in 2017 focused on the growing number of non-contagious diseases that have been on an upward trend for some time now. This trend has, in turn, had an effect on the total amount of money that hospitals spend on treatment and research. Yet, it is commonly believed that private healthcare is responsible for the healthcare business in India, and the majority of payments are paid directly from the pockets of individuals or their families rather than through health insurance. The health insurance policy implemented by the government has, up to this point, fostered the growth of the private sector.

In the year 2018, the government of India started the AYUSHMAN BHARAT initiative, which is a healthcare-oriented programme that is supported by the government. It is estimated that this programme will cover nearly half of the people in the population who do not have access to affordable health insurance.

TYPES OF SECTORS IN HEALTHCARE

It includes the following: - The outpatient care portion of India's public health system accounts for 18% of the total, while the inpatient care portion accounts for 44%. Individuals whose living standards are lower have a greater propensity to utilise public healthcare services than persons whose living standards are in the middle or upper class. In addition to this, women and people of advanced age are more likely to make use of the services provided by a public healthcare service provider. The establishment of a public healthcare system had the overarching goal of making it possible for all people to receive treatment for their ailments without being discriminated against on the basis of their socioeconomic standing or caste.

The central government is responsible for family healthcare and the prevention of significant diseases, whereas the state governments are in charge of local hospitals, sanitation, and promotion, which varies from state to state depending on the requirements of various communities. Various aspects that are related to public medical care are split between the state and public government sectors. Concerns that the nation as a whole as a whole is currently facing or may have to face in the future are the focus of communication between the state and public governments regarding healthcare issues. These issues, which require resources on a large scale, represent the problems that the nation as a whole may have to face in the future.

In-house medical care: Since 2005, the capacity of the private sector to provide healthcare services has been steadily increasing. It is superior to the public sector in terms of both quality and quantity, as it accounts for 58% of the hospitals in the country, 29% of the beds in hospitals, and 81% of the country's medical professionals.

According to the findings of the National Family Health Survey, the private healthcare sector continues to be the primary provider of medical treatment for 70% of families residing in urban areas and 63% of family units located in the rural areas. In the most recent 25 years, there has been a consistent increase in the utilisation of medical facilities for both outpatient and inpatient administrations, according to a report that was carried out in 2013 by the IMS Institute for Healthcare Informatics across 12 states and more than 14,000 families. According to a survey that was published not too long ago by Sanjay Basu, in terms of the level of quality provided by medical services, it was found that medical care workers in the private sector spend more time with their patients.



QUALITY OF HEALTHCARE

South India

Informal service providers offer medical care to patients in a great number of areas across India, despite the fact that they do not possess the necessary credentials to diagnose or treat patients. In most circumstances, consultation with these providers is only necessary in cases of common ailments like the common cold, cough, or fever. These informal practitioners in Andhra Pradesh prefer to prescribe allopathic medications to their patients, and they conduct consultations at the patients' homes.

In the southern region of India, there are a significant number of people who choose the informal providers since the services they offer are provided by them at a reduced rate. These people are not engaging in any criminal behaviour; yet, they frequently end up counselling in areas that are far beyond their level of expertise.

Northeastern India

The private medical sector in India does not have a standard of care that is available across all offices, which has resulted in a great deal of diversity in the nature of the healthcare services that are provided. Padma Bhate-Deosthali conducted a recent in-depth study that was published in Reproductive Health Matters. The study looked at the level of maternal care provided in various parts of India's healthcare system, namely in the state of Maharashtra. 137 of the 146 maternity medical clinics that were surveyed did not have a certified birthing assistant, which is vital for maternity homes as appropriate care cannot be given without maternity specialists in some complex cases. The results showed that none of the maternity homes had a birthing assistant certified by the appropriate organisation.

INTERESTING INFORMATION CONCERNING THE INTERNATIONAL HEALTHCARE SECTOR IN INDIA

1. It is anticipated that the industry will expand to 133,44 trillion US dollars by the year 2022.
2. Because of India's dependence on its state administration, there are significant disparities in the quality of medical care provided throughout the country.
3. The proportion of GDP that the government allocates to expenditures on healthcare rose to 1.4% in 2018. They have plans to increase this even more to 2.5% of GDP by the year 2025.

Throughout the first six months of 2018, India was able to successfully negotiate 23 healthcare transactions totaling 679 million USD.



MARKET SIZE OF HEALTHCARE SECTOR

During 2016, the healthcare sector in India has experienced a Compound Annual Growth Rate of approximately 22% throughout this time period. At this rate, it is projected that it will reach 372 billion US dollars in the year 2022. Both in terms of revenue and employment opportunities, the healthcare industry has grown to become one of the most important parts of the Indian economy.

The global health industry is continuing to rise to the new challenges given by the ongoing epidemic, which continues to monopolise the attention and resources of health care systems. They are continuously working to improve the human experience of their workforce, as well as reshaping what types of work are done, how it is done, and where it is done. Additionally, they are rapidly scaling up their virtual health services for patients, as well as forging partnerships and sourcing supplies.

While doing so, they continue to address the growing significance of disparities in health care, sustainability, and environmental protection. In our health care forecast for 2022, we assess the current situation of the global health care sector, investigate the six most pressing sector concerns, and describe the steps that can be taken to create resilience and produce better health care outcomes in the context of the new normal.

From a value of US\$110 billion in 2016, it is anticipated that the Indian healthcare sector would experience a threefold increase by 2022, rising at a compound annual growth rate (CAGR) of 22% between 2016 and 2022. This will bring the sector's total value to US\$372 billion.

It is anticipated that India's healthcare infrastructure will exceed 110 billion dollars in 2016 at the end of the fiscal year.

There will be a total of 4.7 million individuals working in the healthcare industry in India by the year 2021, making it one of the major employers in the country. This industry was responsible for the creation of an additional 2.7 million employment in India between 2017 and 2022, which is an average of approximately 500,000 jobs per year.

Public spending on healthcare in India accounted for 2.1% of the country's GDP in 2021-22, up from 1.8% in 2020-21 and 1.3% in 2019-20, according to the economic survey conducted in 2022.

During the fiscal year 2021, health insurance providers had a 13.3% increase in the gross direct premium income underwritten by their businesses. The health industry accounts for 29.5% of the country's total gross written premiums, making it the most profitable sector.

According to the report India tourism statistics at a glance 2020, there were approximately 697,300 international visitors who sought medical treatment in India during the fiscal year 2019. The market for medical tourism in India had a value of \$2.89 billion in the year 2020 and is projected to reach a value of \$13.42 billion by 2026. The Medical Tourism Association (MTA) has placed India at the tenth spot on the medical tourism index (MTI) for 2020-21, out of a total of 46 destinations.

It is anticipated that the size of the e-health market will reach 10.6 billion dollars by the year 2025.

THE EXPANSION OF THE HEALTH CARE INDUSTRY

During 2016, the healthcare industry in India has experienced a compound annual growth rate of approximately 22% over this time. At this rate, it is anticipated that it would reach a total of 372 billion USD in the year 2022.

High demand: It is anticipated that India's healthcare market would reach US\$372 billion by the year 2022. This growth will be driven by rising incomes, improved health awareness, lifestyle disorders, and an increase in the availability of insurance.

There will be a total of 4.7 million individuals working in the healthcare industry in India by the year 2021, making it one of the major employers in the country.

Attractive opportunities: - according to the economy report completed in the year 2022, India's public expenditure on healthcare increased to 2.1% of GDP in 2021-22 from 1.8% in 2020-21.

Increased availability of a sizable number of medical professionals who have received adequate education and training in the country

From 0.83 million in 2010, the number of allopathic doctors who had medical qualifications that were recognised by the I.M.C legislation and who were registered with state medical councils or national medical councils climbed to 1.3 million in November of 2021.

Policy and assistance from the government include the following: - in the federal budget for 2022-23, the ministry of health and family welfare was allotted Rs 86,200.65 crore.

To aid in the development of India's medical facilities, the Indian government is mulling over the possibility of launching a credit incentive scheme with a total value of Rs. 500 billion.

GROWTH OF HEALTHCARE SECTOR IN GUJARAT

Throughout the past two decades, the state of Gujarat's medical care system has accomplished a number of significant new goals. A level of effort that has never been seen before has been put into improving Gujarat's healthcare infrastructure. Work has been done everywhere, from the bustling cities to the quiet countryside. Rural areas saw the establishment of thousands upon thousands of health centres and first-aid centres. A total of around 600 Deen Dayal Aushadhalayas were also constructed in metropolitan areas.

Both the state's healthcare infrastructure and its health indices have been demonstrating steady progress in Gujarat. In the realm of development, the practise of adhering to the mantra of "Sauno Saath, Sauno Vikas" to "Sauno Prayas" is producing the outcomes that were hoped for.

At many different levels, this state has been quite successful in creating and sustaining a high-quality health care system.

In Gujarat, there is a noticeable presence of various health facilities. The following is a list of some of the notable accomplishments that have been made in the health sector of the state: 8

- The rate of institutional delivery in Gujarat is on track to reach one hundred percent in 2020-21, having climbed from 55.9 percent in 2003-04 to 99.6 percent in 2020-21.
- The death rate has fallen from 7.8 in 2001 to 5.6 in recent years (SRS 2019).
- The Maternal Mortality Ratio (MMR) has dramatically dropped, going from 202 (SRS 1999-01) to 75. This is a huge improvement (SRS 2016-18).
- The Infant Mortality Rate (IMR) has decreased from 60 in the year 2001 to 25 in recent years (SRS 2019)
- As of the end of October 2021, the state had a total of 345 Community Health Centers, 1477 Primary Health Centers, and 9231 Sub Centers that were operational.
- The cancer care offered at Gujarat's government hospitals is among the best in the world.

ABOUT MAJOR MULTISPECIALITY HOSPITAL IN INDIA

1. APOLLO HOSPITAL
2. KD HOSPITAL
3. SHALBY
4. FORTIS HOSPITAL
5. NANAVATI HOSPITAL
6. MANIPAL HOSPITAL
7. MAX SUPERSPECIALTY HOSPITAL
8. WOCKHARDT HOSPITAL

1. APOLLO HOSPITAL:



A network of medical facilities known as Apollo Hospitals can be found all across the company. The hospital was established by Dr. Pratap Reddy in Chennai in 1983, and it currently has more than 2000 beds in operation across the nation. Because of the rapid expansion of this hospital chain, which is now present in every city, you will have the opportunity to visit an Apollo hospital where patients are being treated. As it is well-known that the company creates its own medicines, its products are highly popular.

2. FORTIS HEALTHCARE INSTITUTE:



Dr. Parvinder Singh launched the Fortis Healthcare Institute in the year 2001. As of right now, the organisation has effectively established itself in a variety of locations. In an ideal world, it would be a network of medical facilities. It also has a presence in Singapore, and the company's long-term goal is to create super-specialty hospitals all over the world that are recognised as leading brands in the medical sector.

3. WOCKHARDT HOSPITAL:



Wockhardt Ltd. is the name of an Indian business that was established in the year 1960. The company was initially established by one Mr. Habil Khorakiwala. The organisation has transformed into a global company as a result of its presence in all developing countries such as Mexico, Brazil, and Russia, among others. The corporation has created production operations in a variety of locations, some of which are the United Kingdom (UK), the United States (US), Ireland, and France. This healthcare organisation provides state-of-the-art treatment facilities to the people of the country so that it can better serve them.

4. MAX HEALTHCARE INSTITUTE LTD.

One of the most significant medical facilities in India is owned and operated by Max Healthcare Institute Ltd. Throughout the National Capital Region of Delhi, Haryana, Punjab, Uttarakhand, and Maharashtra, the company operates 17 healthcare institutions with a total of 3,400+ beds. Around 85 percent of our available beds are located in the urban area. Abhay Soi, who serves as the hospital's chairman and managing director, is responsible for its development and promotion. KKR, the most well-known worldwide private equity fund, is also involved in the endeavour.

5. MANIPAL HOSPITAL:



Manipal Group, an education and healthcare conglomerate that includes six colleges and 27 hospitals, is under the management of medical doctor RANJAN PAI.

6. KD hospital:

The KUSUM DHIRAJLAL hospital is a specialist hospital with a total of 300 beds and can be found in Ahmadabad, Gujarat, India. It first opened its doors in may 2018 under the patronage of the Shri Harihar Maharaj

Charitable Trust. It now occupies a vast 6 acre facility and provides services for approximately 45 different super specialities all under one roof.

HOSPITAL SERVICE PROFILE (PRODUCT PROFILE) in India

VISION

To provide each patient with the same level of world-class care, exceptional service, and compassion that we would want for our loved ones, and to lead the evolution of healthcare in order to make it possible for every member of the communities that we serve to lead a happier and healthier life.

Mission

The mission of India hospital is to provide quality health services and facilities for the community, to promote wellness, to alleviate suffering, and to restore health as quickly, safely, and humanely as it is possible to do so, in a manner that is consistent with providing the best service we are able to give at the highest value for all parties concerned.

TO OUR PATIENT:

We shall organise our business practises so that they are centred on the patient and the patient's family. We shall maintain the patients' privacy and treat them with compassion, care, and respect at all times. We will provide care that is knowledgeable, forward-thinking, and easily accessible. We are going to make it a priority to maintain and even improve the level of service we provide.

TO OUR EMPLOYEE:

We would like to thank all of our employees for their hard work in achieving our mission. We will provide a working atmosphere that is risk-free, comfortable, and spotless. We value the uniqueness of each member of our staff and will pay attention to the issues and recommendations they offer. We will provide our staff with the tools and technologies they need to do their jobs effectively. We are committed to providing our employees with many chances for their professional growth and development.

TO OUR ORGANIZATION:

We are accountable and responsible for the future success, sustainability, and financial viability of our organisation. In addition, we are active contributors in the process of framing the future of our organisations and are active team players. We will take measures to safeguard the properties, resources, and interests of our organisation.

TO OUR COMMUNITY:

Both as a group and as individuals, we bear a responsibility to the community in which we live and work. We are not only concerned with the areas of the community in which we have a financial stake; rather, we are concerned with the overall wellbeing of the community.

The initial level of medical care

Better health for all people is the ultimate objective of primary health care systems. Whatever the patient's condition may be, the goal is to make it as simple as possible for them to receive medical attention.

Critical care

Our medical facility offers specialised critical care areas in order to fulfil the requirements of each specialisation. The support of the super specialists is also available in these domains.

Contemporary medical lab

Without taking away from the hospital's primary mission of providing medical treatment, our diagnostic services are among the very best in the industry. By relieving them of the burden of overseeing yet another department in their organisation.

Facilities for the wards

The fact that hospitals offer both inpatient and outpatient care is one of the characteristics that set them apart from other types of medical institutions, such as clinics and care centres. This is one of the differentiating aspects that makes hospitals special. Every hospital needs to have ward allotment for patients who are suffering from severe illnesses and injuries. This provides the carers with the ability to continuously monitor the patients' health conditions, which in turn allows for more precise treatment techniques to be chosen.

Patients can choose from a variety of food options when they are hospitalised in India. There are also private wards, semi-private wards, and general wards among these several options. Patients have the ability to choose any sort of ward they like, although the expenses associated with their choice may vary.

Cancer

We offer comprehensive care for cancer patients and have some of the most advanced treatment facilities in Lucknow. Every patient is evaluated in tandem by our highly qualified oncology team.

Diabetes

Having a reputation for being a leading diabetes hospital in India. Diabetes, endocrine, and metabolic illnesses are all addressed by India hospitals' dedicated diabetes, endocrine, and metabolic disorders institute.

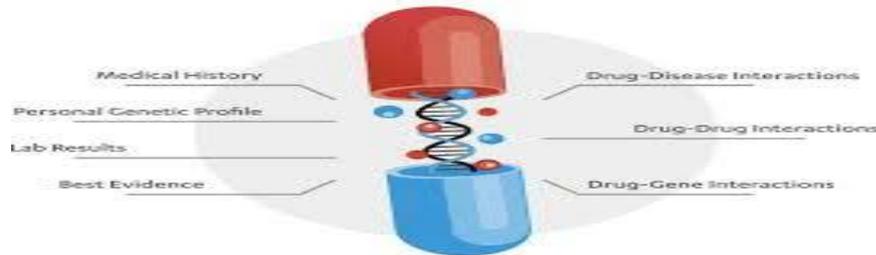
Medicine

It is a new standard of excellence in the medical field since it focuses on providing treatment to patients with high levels of medical complexity and is a medical specialty committed to the delivery of complete medical care to hospitalised patients.

The doctors and staff at Neurology India hospital are highly trained in the diagnosis and treatment of more than 500 neurological illnesses, including a large number of uncommon or difficult conditions.

Pharmaceutical as well as medical diagnosis

The majority of hospitals in India do, in fact, have their own in-house pharmacies and diagnostic departments. This is a very crucial part because having easy and rapid access to medicines and other equipment that is necessary for the treatment method is essential in order to provide the greatest possible healing services.



SWOT ANALYSIS



The use of a SWOT analysis can be incredibly beneficial if you require a useful perspective on how well your healthcare organisation is functioning.

- Investigate the potential for new ventures or innovative approaches to existing issues.
- Identify the areas in which change is feasible. If you discover that you are at a crossroads in your life, taking stock of both your strengths and your flaws can shed light on both the priorities and the possibilities that lie before you.
- Choose which course of action is most beneficial for your company by analysing the opportunities for achievement that exist as well as the challenges that must be overcome.

- Making modifications and improvements to your plans as they are still being carried out. Fresh opportunities in a SWOT analysis may offer up more decision-making options, but new threats may eliminate options that were previously available.

THE HEALTHCARE INDUSTRY'S CAPABILITY TO BENEFIT FROM A SWOT ANALYSIS

Your healthcare organization's strengths are the aspects in which it excels and in which it is distinguished from other businesses in its industry. Is it your well-known and respected brand? Unique technology? Incomparable results? You need to be able to recognise and assess your Unique Selling Proposition (USP), and provide this information as part of the section on your strengths.

Create a list of your competencies and resources that can serve as the foundation for a distinguishing edge over your competitors. Consider what makes your company "tic" by focusing on its strengths, which are an essential component of the organisation. Inquire: Which of your strengths do you value the most? How can we make the most of each of their strengths and use them to our advantage?

STRENGTHS INCLUDE

- a brand-new service or one that is innovative;
- capabilities or cost advantages;
- cultural connections;
- an extraordinary reputation;
- other aspects that add value;
- specialised knowledge and/or experience;
- a superior location or geographic advantage;
- unique values that are the engine that drives your organisation.

FLAWS IN THE WAY THAT SWOT ANALYSIS IS USED IN THE HEALTHCARE INDUSTRY

Your healthcare organization's inabilities may be keeping it from reaching its full potential in terms of performance. Which aspects require further development (or ought to be completely avoided)? Turnover that is significantly higher than usual? Insufficient capacity in the supply chain.

Ask yourself: What could eliminate or get rid of this weakness? In certain cases, a weakness can be defined as the absence of a particular strength, while in other instances, a weakness can be understood as the inverse of one of your strengths.

OPPORTUNITIES AND DANGERS IN THE FUTURE

The OPPORTUNITIES and THREATS portions, which are located lower on the matrix, both have their roots in the outside world. You do not have any influence or power over these matters. Opportunities are good for you, while threats can hurt you.

OPPORTUNITIES OFFERED BY THE STRENGTHS AND WEAKNESSES ANALYSIS IN HEALTH CARE

In a SWOT analysis, opportunities are positive external variables that could offer you an advantage over other businesses in your industry. Because opportunities are more likely to develop from circumstances that are unrelated to your business, you should keep a constant watch on what might take place in the future. Your ability to identify and capitalise on opportunities can make a significant difference in how well you are able to compete in the healthcare industry you serve.

What other opportunities lie outside our organisation, in addition to emerging or important trends, and how can we effectively capitalise on or profit from each of these opportunities?

A market that has been left by a competitor; the availability of new technology; changes in the demographic profile or need; the weaknesses of competitors; the absence of dominant competition; new market segments that offer improved profit; new vertical, horizontal, or niche markets

THREATS Identified Using a SWOT Analysis of the Healthcare Industry

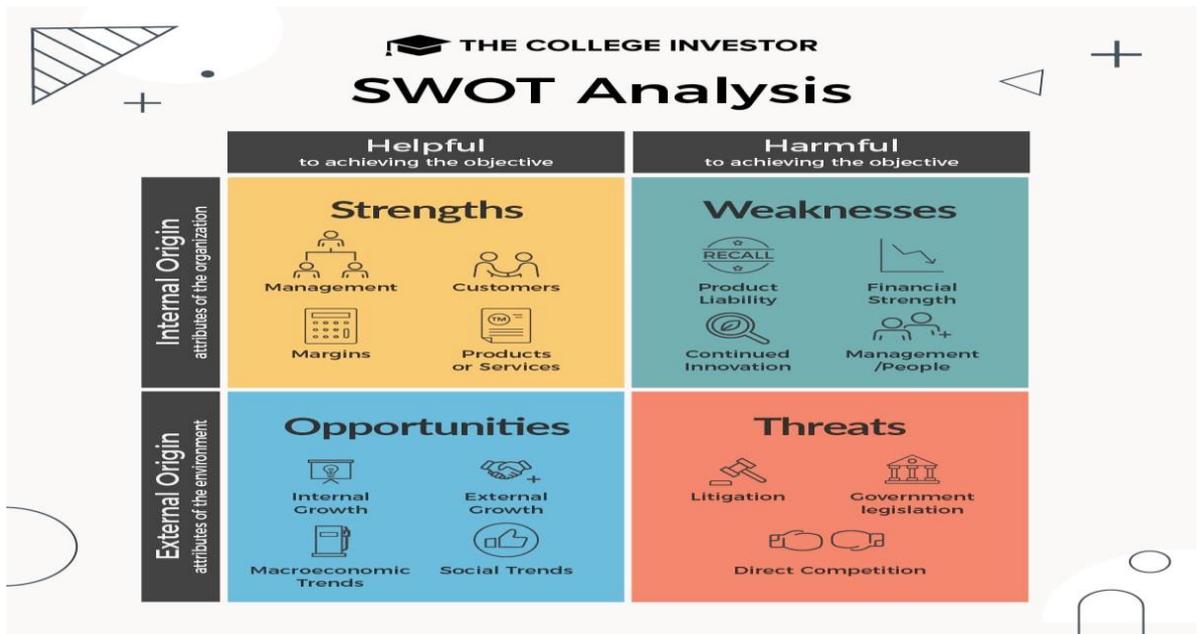
Anything that gets in the way of your organization's performance and has the potential to cause it harm can be categorised as a threat. Threats can be posed to any kind of practise, but far too many people either fail to see them, choose to ignore or downplay them, which can result in significant financial losses. Inquire: What can be done to lessen the impact of each risk? Is it possible for a potential risk to turn into an advantage?

When conducting a SWOT analysis, one way to discover threats is to analyse the actions being taken by one's competitors and to ask oneself whether or not one should shift their focus in order to face the challenge. But, it can be a mistake to copy them without knowing how it would improve your position, so you should constantly keep in mind that what your competitors are doing may not necessarily be suitable for you. This will help you avoid making this error.

THE FOLLOWING ARE EXAMPLES OF THREATS:

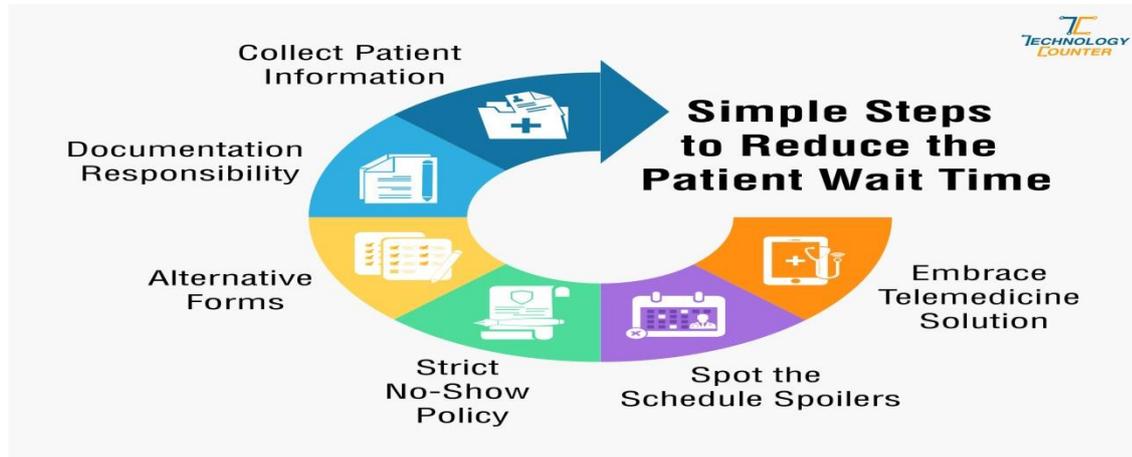
- A rival business offers an original product or service
- economic fluctuations
- loss of key staff or colleagues

- new or increased competition
- seasonally shifts in market demand or referral source



CHAPTER -2

LITERATURE REVIEW



LITERATURE REVIEW

This article, "reducing consultation waiting time and overtime in outpatient clinic: challenges and solutions," according to ZHU Zhecheng HENG Bee (2002), is focused on the factors that cause long patient waiting time/clinic overtime in outpatient and how to lessen them using discrete event simulation. Specifically, the article examines how to reduce the factors that cause long patient waiting time/clinic overtime. In order to demonstrate how the clinic act can be improved by justifying the factors that have been found, a discrete simulation model is being created. More appointment slots are arranged in each operational session so that the amount of time between appointments remains consistent. This is done so that the increasing appointment lead time can be mitigated. On the other hand, the increasing amount of work that must be done during each session poses other issues. Patients have to wait significantly longer for their consultations as the overcrowded clinic continues to get more packed. There is also a greater possibility of going over the allotted session time. The longer wait times and more overtime both have a detrimental influence on both the happiness of patients and the morale of personnel.

Patients can receive clinical services from the Out Patient Department (OPD) without being required to stay in the hospital overnight. Individuals who require medical or surgical care but are not experiencing an urgent medical emergency are typically seen in the outpatient department (OPD). Patients find that receiving care outside of hospitals is not only more convenient for them, but also less expensive than receiving care inside hospitals. There is a lower risk of getting an infection while in the hospital. Because there is a shortage of hospital beds in the country, outpatient services are being encouraged to be utilised to their full potential.

According to V Gijoa and jiju Antony's paper, "Patient Waiting Time Department Using Lean Six Sigma Methodology," which was published online on July 17, 2013, in the Wiley online library, "addresses the issue of longer patient waiting time in the outpatient department of a super specialty hospital attached to a manufacturing

company in India." Because of the increased wait times at OPD, employees are required to be absent from their place of employment for longer stretches of time.

According to Norman T.J. Bailey, a research into the type of queuing process that takes place in hospital outpatient departments has been carried out using random numbers as the basis for the investigation. The amount of time that patients have to wait, as well as the amount of time that consultants may have to kill while they are waiting for the next patient, have both received a lot of focus and consideration. When compared to the many appointment systems that are currently in use, it is possible to draw the conclusion that, by making an appropriate choice regarding the system that will be implemented, a sizeable portion of the waiting time experienced by patients can be eradicated without appreciably affecting the consultant. A practise that is advocated is to schedule visits for patients at regular intervals, with each session lasting the same amount of time as the typical consultation and the consultant starting work when the second patient arrives. The discussion focuses on the effects that can arise from shifts in factors such as the appointment interval, the number of patients who visit the clinics, and the size distribution of the lines. Furthermore taken into account is the accuracy of the results that were acquired.

In the year 2000, C. A. Stone, J. H. Saxby, and V. S. Devaraj: Outpatients who do not show up for their appointments are a typical cause of inefficiency in the healthcare system. This causes a loss of both time and resources and may even result in longer wait times. In the period of time between January and June of 1997, a prospective audit of plastic surgery outpatient clinics was carried out for the purpose of determining the clinical and demographic profile of patients who did not reach their goals. 16% of the 6095 appointments that were scheduled were not kept. Utilizing the demographic information, we altered our follow-up recommendations to reflect risk factors for numerous non-attendances, and we developed a self-referral clinic to replace standard follow-up for high risk non-attainers. Both of these changes were made in order to better serve our patients. A second audit conducted during the same six months of 1998 found a non-attendance rate of 11% after these improvements were implemented.

A large number of unnecessary follow-up appointments are scheduled for patients who have expressed no desire for further attention. This study, which shows how risk factor analysis can identify a group of 37 patients who are unlikely to attend again after missing one appointment, may be a useful model for the reduction of patient non-attendance in other specialties. The study found that 37 patients were unlikely to attend again after missing one appointment.

Sharon Silow-Carrol is a health policy analyst with than 20 years of expertise in health care research. She holds master's degrees in both business administration and social work. She has developed an expertise in health system reforms on the local, state, and national levels, as well as strategies implemented by hospitals to improve quality and patient-centered care, public private partnerships to improve the performance of the health care system, and efforts to meet the needs of underserved populations. Before she became a principal at health management associates, she held the position of senior vice president at the economic and social research institute, where she

directed and oversaw research studies, participated in those studies, and authored a great number of reports and articles on a wide variety of topics related to health care

Jack A. Meyer is a health economist with over 20 years of experience conducting research and consulting projects in the field of health care. He holds a doctoral degree in economics. In-depth research projects on health have been directed by him for a number of different foundations, and he has provided policy analysis and strategic planning services to customers from the corporate community as well as government organisations. Dr. Meyer is an expert in formulating and analysing ideas for providing coverage to the uninsured on both the national and state levels. In addition to this, he has concentrated his efforts on programmes developed by both private employer groups and the government to enhance quality and patient safety. Dr. Meyer served as the president of the Economic and Social Research Institute for a number of years before joining HMA.

Am J Hosp Pharm, 1984:-

A computer simulation was used to research the costs associated with a number of different possibilities for cutting the amount of time that patients have to wait in an outpatient pharmacy. A baseline of five pharmacy personnel, including technicians A, B, and C, as well as a typewriter, had their times for completing prescription filling duties recorded. The pharmacist was also included in this baseline. In this study, we employed a fixed factorial design with 12 different configurations, each of which modified the number of pharmacy personnel (one, two, or three technician As; one or two typists; and one or two technician Bs). The amount of time a patient would have to wait in each configuration was calculated using a computer simulation. The salaries of pharmacy employees were used to calculate the relative cost of six different configurations that were anticipated to minimise the amount of time spent waiting to less than ten minutes. A similar degree of overall waiting time reduction was observed across all configurations that made use of additional technician Bs, typists, or both. It was determined that one of these configurations would result in the lowest cost relative to the number of daily hours saved.

ORIGIN AND PURPOSE OF THE STUDY:

This difficulty contributes to a variety of public health issues, including impaired access to care, interruption of hospital work patterns, and patient dissatisfaction. Long waiting times for patients are commonly seen in outpatient department, billing department, pharmacy and laboratory departments.

Since the issue of lengthy wait times continues to be a common challenge that can affect the level of satisfaction a patient has with their care, it seems important to gain a better understanding of how the factors of waiting times, service times, and patient satisfaction with care are related to one another. Within the scope of this study, we investigated this issue within the context of an outpatient department, as well as the laboratory, billing, and pharmacy departments of a major teaching hospital in India. In this scenario, the issue of excessively high wait times had not been extensively investigated up until this point. The purpose of the study was to investigate the possible relationships that may exist between a number of time-related variables that were meant to represent the patients' waiting times.

In the course of this research, we evaluated the problem of patient wait times in a billing, pharmacy, laboratory, and outpatient department. Also, we investigated the many options available for managing patients' perceptions of waiting time, service time, and satisfaction with care.

During their trips to an outpatient department and other departments of a major hospital in India, the participants of this study were timed on how long they waited, how long they spent obtaining care services, and how much time they spent in total during their visits to the outpatient department. It was also taken into account how the patients felt about the length of time they waited to be seen as well as the amount of time they spent actually obtaining medical treatment. We investigated the connections between the patients' experiences with the care they received and the length of time it took to achieve the goals.



CHAPTER -3

RESEARCH METHODOLOGY

STATEMENT OF THE PROBLEM:

There is a concern to improve the quality of administration in the hospitals to meet the rising expectations of the people. Apart from the quality of staff and equipment's the experience and the image carried by patients about the hospital depend on the human aspects like concern, waiting time and understanding shown by the hospital staff. This study is mainly focused on reducing the waiting time of the patients.

DESCRIPTIVE RESEARCH:

Descriptive research includes facts finding enquiries and surveys of different kinds. Descriptive research provides data about the population or universe being studied. The main purpose is to describe things in their present form

OBJECTIVE OF THE STUDY

PRIMARY OBJECTIVE:

To identify the reason for long waiting times at the three selected departments of the hospital and suggests improvement to increase the efficiency of serving patients.

SECONDARY OBJECTIVE:

1. To identify the average time spent by a patients in the registration, laboratory and pharmacy.
2. If the waiting time is high, then to identify the factors responsible for high waiting time in the outpatient department registration, laboratory and pharmacy.
3. To recommend appropriate suggestions to optimize the waiting time .
4. Find solution to overcome delays.
5. Patients need to know we are respecting their waiting, so there are some ways to lessen the stress and show that we are considerate of our patient time.
6. Patients who have to wait for long periods of time are usually not very happy with the hospital and it can set a bad tone for the overall visit.

The project is based on OPD to understand the causes for the delay in waiting time of the patients in various departments and recommendations to reduce it.

1. To determine the average time spent by the patient in the OPD.
2. To study the causes of delays and suggest interventions.
3. To reduce the waiting time of the patient in the OPD.
4. To identify the factors those are responsible for high waiting time in various departments.
5. To recommend appropriate suggestions to optimize the waiting time in various departments.

SCOPE OF THE STUDY

The primary activity of the Indian hospitals is providing medical, diagnostic and treatment services and also specialized accommodation services to in-patients i.e., receiving individuals for medical reasons, providing them

with medical care on an on-going basis and offering diagnostic and treatment services. The Secondary activities of India top hospitals provide wide variety of outpatient services at low cost.

RESEARCH HYPOTHESIS

Ho1: Waiting time and hospital management have no significant effect on decreasing waiting time.

Ha1: Waiting time and hospital management have significant effect on decreasing waiting time.

Ho2: Decreasing time has no significant effect on the profitability of Hospitals.

Ha2: Decreasing time has significant effect on the profitability of Hospitals.

METHODOLOGY

The research technique can be thought of as a kind of written game plan for carrying out the research. There are several facets to consider when conducting research technique. Not only does it cover the research techniques, but it also examines the reasoning that lies behind the methods that were applied within the framework of the study, and it questions why a specific approach or technique was the sole one that was employed.

RESEARCH DESIGN

THE RESEARCH DESIGN WILL BE USED IN THIS STUDY Exploratory RESEARCH.

SOURCES OF DATA:

1. PRIMARY DATA: Most of the information will be gathered through primary sources. The methods that will be used to collect primary data are:

- Questionnaire.
- Websites.
- Journals.

2. SECONDARY DATA: internet, hospital records and other sources.

DATA COLLECTION METHOD:

The data will be collected using both by primary data collection methods as well as secondary sources.

POPULATION:

The study populations related to waiting times for consultations consisted of all visiting outpatients of the studied hospital various departments OPD, registration department, billing, pharmacy departments.

SAMPLE SIZE:

The sample size by 100

Total samples of 100 respondents will contact who respond to the questionnaires.

METHOD USE TO PRESENT DATA:

Data Analysis & Interpretation – Classification & tabulation transforms the raw data collected through questionnaire in to useful information by organizing and compiling the bits of data contained in each questionnaire i.e., responses are converted in to understandable and orderly statistics are used to organize and analyze the data:

- Simple tabulation of data using tally marks.
- Calculating the percentage of the responses.
- Formula used = (name of responses / total responses)

Graphical analysis by means of pie charts.

STATICAL TOOLS:

The tool use in this study will MS-EXCEL, MS-WORD, MS-EXCEL used to prepare pie-charts and graphs. MS-WORD used to prepare or write the whole project report.

RECOMMENDATIONS

The following recommendations were made to reduce waiting time for registration, OPD and billing departments.

1. Displaying the consultants' timings in the OPD as well as online will reduce the number of inquires made by the patients.
2. Introducing online appointment bookings.
3. Lab report should be dispatch at the lab counter and not in the OPD area or a separate counter for lab report dispatch.
4. Proper training of the staff
5. Fixed consultant timings in OPD rooms.

LIMITATION OF THE STUDY

1. 1. Time was a key constraint for the study because many of the top managers and functional managers were busy with their own daily routines. This was a big limitation for the study.
2. 2. Inability to obtain secret information: the senior management was hesitant to divulge information connected to the organization's internal issues.
3. 3. Lack of support from employees: the majority of employees had their jobs to complete for the day, and as a result, there was insufficient time available to be able to interview them in detail.

CHAPTER -4

DATA ANALYSIS AND INTERPRETATION

DATA ANALYSIS AND INTERPRETATION

The surveys were carried out, and the conclusions drawn from them were as follows, bearing in mind the aims of the study:

Evaluation:-

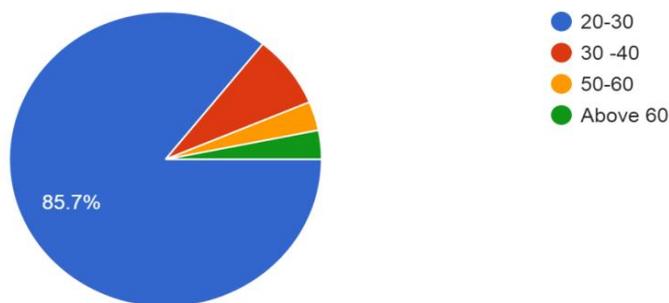
Keeping this point in mind and in order to fulfil the evaluation variants that may form the basis for the objectives of the studies, an attempt has been made to segment the various respondents based on some aspects that were collected from them through the questionnaire. This was done in order to fulfil the evaluation variants that may form the basis for the objectives of the studies. Tables and graphs have been used to illustrate these findings.

At the conclusion of this project, a copy of the questionnaire that was administered can be found contained, and the number of respondents used for the sample was one hundred. The results of all the computations and interpretations of the numbers are for 100.

Q1 Age of the patient

- A. 20-30
- B. 30 -40
- C. 50-60
- D. Above 60

1. Age of the patient
63 responses



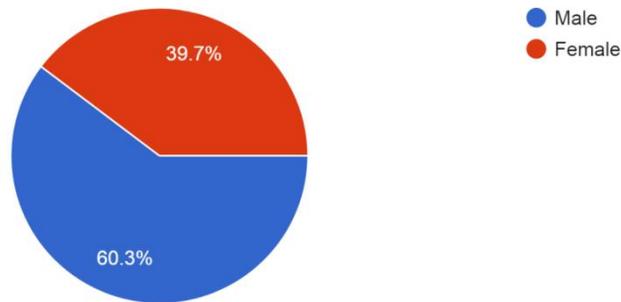
Interpretation

According to the above graph there are 85.7% patients are age between 20-30 years, 7.9% clients' age between 30-40 years, 3.2% employee between 50-60 year, and 3.2% age above 60 years.

2. Gender of the patient

- (A) Male
- (B) Female

2. Gender of the patient
63 responses



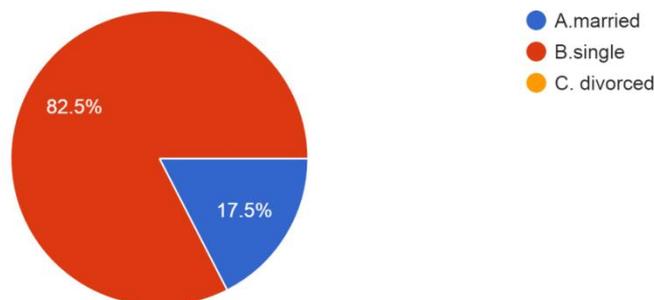
INTERPRETATION

In the above chart there are 60.3% of male patient and 39.7% of female patient according to survey

Q3. Marital status of the patient

- (A) Married
- (B) Unmarried

3. Marital status of the patient
63 responses



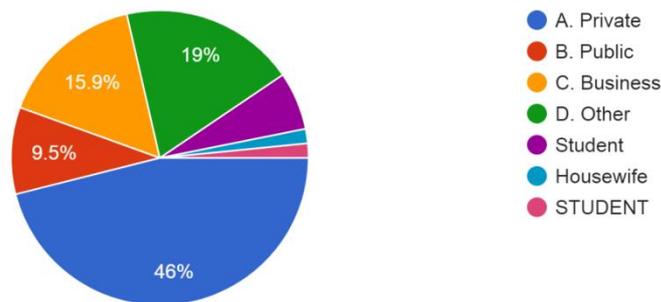
INTERPRETATION

In above pie chart there are 82.5% patient are single and 17.5% patients are married according to survey.

4. Occupation of the patient

- (A) Private
- (B) Public
- (C) Business
- (D) Other

4. Occupation of the patient
63 responses



INTERPRETATION

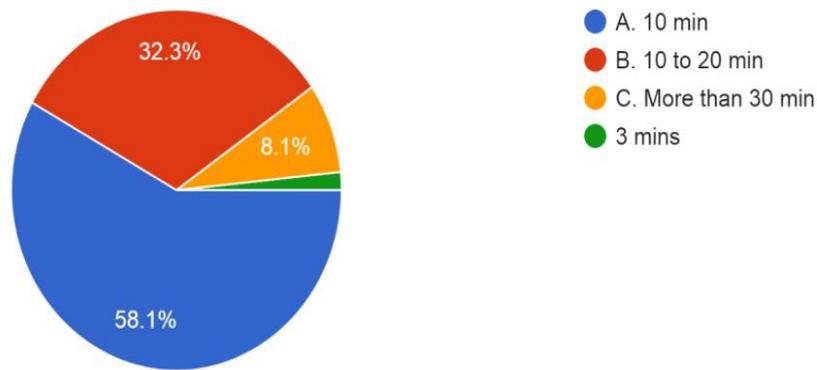
According to above graph 46% Patient work doing in private company 19% have other occupation 9.5% working in public company 15.9% patient have their own business.

Q5. Maximum time taken for registration

- (A) 10 min
- (B) 15-20 min
- (C) More than 30 min

5. Maximum time taken for registration

62 responses



Interpretation

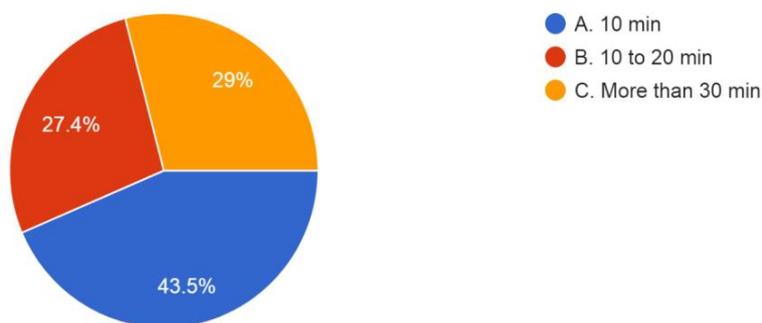
According to the above graph 58.1% patients said maximum time taken for registration 10 min, 32.3% patients said registration time taken between 10 to 20 minutes, and 8.1% said more than 30 minutes time taken for registrations.

Q6. Overall time taken to complete the procedure

- (A) 10 min
- (B) 10-20 min
- (C) More than 30 min

6. Overall time taken to complete the procedure

62 responses



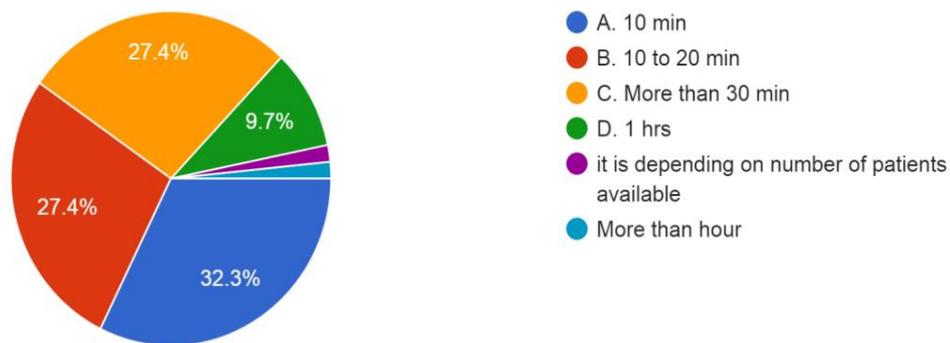
Interpretation

According to data analysis 43.5% patients said 10 min time taking for complete the procedure 27.4% people said time taking for complete procedure 10 to 20 min, and 29% patients said overall time taken for complete procedure more than 30 minutes.

Q7. Maximum waiting time for medical advice/treatment

- (A) 10 min
- (B) 10-20 min
- (C) More than 30 min
- (D) 1 hrs

7. Maximum waiting time for medical advice/ treatment
62 responses



Interpretation

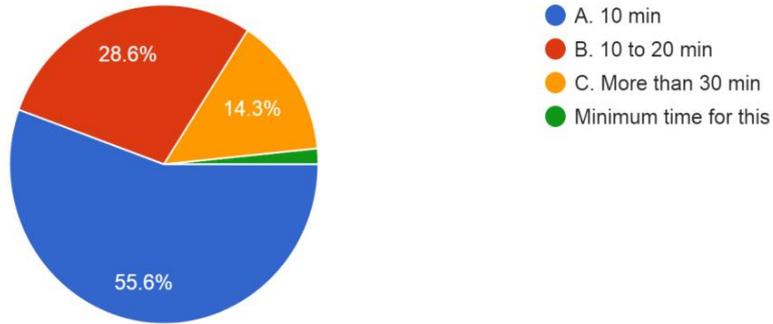
According to above data analysis 32.3% patients said time taken for medical advice and treatment 10 minutes, 27.4% said time taken between 10-20 minutes for the medical advice and treatment, 27.4% said more than 30 minutes time taken for medical advice and 9.7% said that 1 hrs time take for medical advice and treatments.

Q8. Time taken to provide medicine for single patient

- (A) 10 min
- (B) 10-20 min
- (C) More than 30 min

8. Time taken to provide medicine for single patient

63 responses



Interpretation

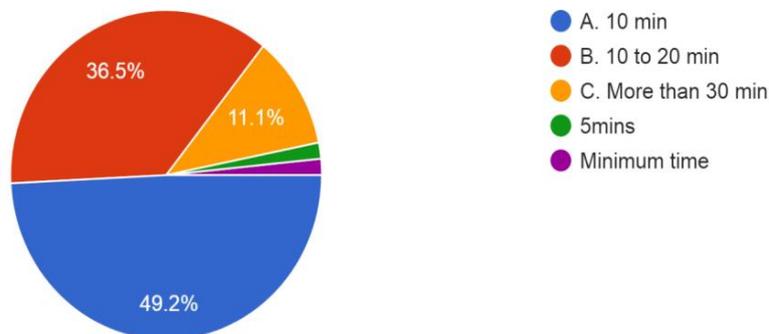
According to 55.6% patients they said medicine provide for single patient time taken 10 minutes, 28.6% patient said time taken between 10 to 20 minutes for providing medicine of single patient, and 14.3% said time taking more than 30 minutes for providing medicine to single patients.

Q9. Time taken for billing the medicine

- (A) 10 min
- (B) 10-20min
- (C) More than 30 min
- (D) 1 hrs

9. Time taken for billing the medicine

63 responses



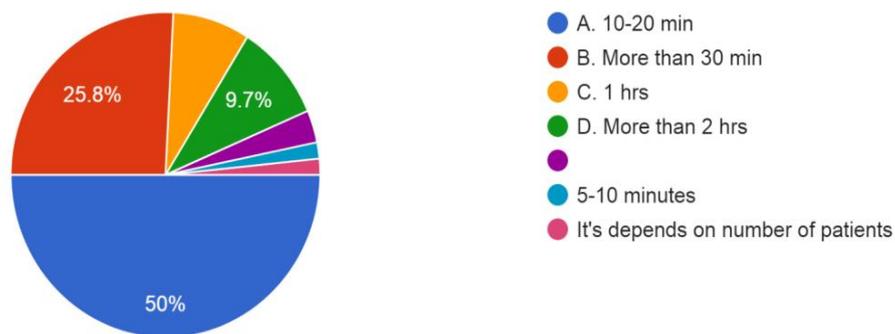
Interpretation

According to analysis we can see in pie chart 49.2% patients said 10 min time taking for billing the medicine, 36.5% patient said that time taking for billing the medicine between 10 to 20 minutes, and 11.1% patient said that more than 30 minutes time taking for billing the medicine.

Q10. Overall waiting time in billing department

- (A) 15-20 min
- (B) More than 30 min
- (C) 1 hrs
- (D) More than 2 hrs

10. Overall waiting time in billing department
62 responses



Interpretation

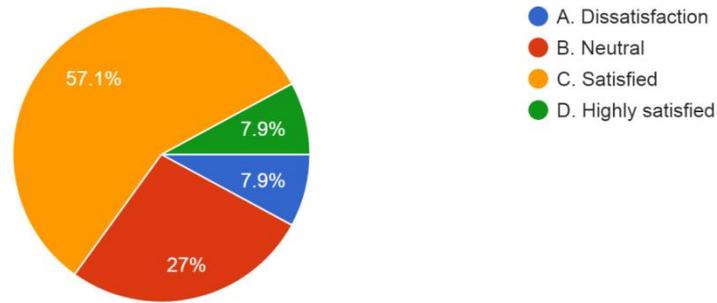
According to analysis, the majority of 50% respondents says that it takes 10-20 minutes overall waiting time in billing department.

Q11 Overall service provided by the hospital

- (A) Dis-satisfied
- (B) Neutral
- (C) Satisfied
- (D) Highly satisfied

11. Overall service provided by the hospital

63 responses

**Interpretation**

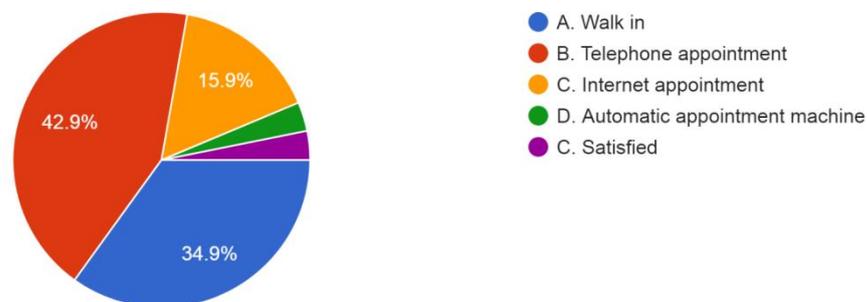
According to analysis, the majority of 57.1% respondents satisfied with the overall service provided by the hospital.

Q12. Sources of register for diagnosis

- A. Walk in**
- B. Telephone appointment**
- C. Internet appointment**
- D. Automatic appointment machine**
- E. Satisfied**

12. Sources of register for diagnosis

63 responses

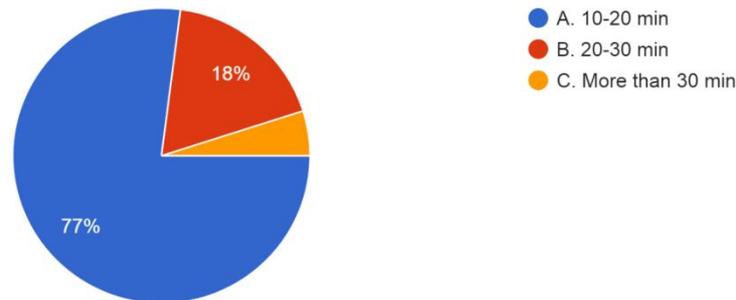
**Interpretation**

According to analysis, the majority of 42.9% respondents have telephonic appointment source of register for diagnosis.

Q13. Time spent by patient in cash payment

- A. **10-20 min**
- B. **20-30 min**
- C. **More than 30 min**

13. Time spent by patient in cash payment
61 responses

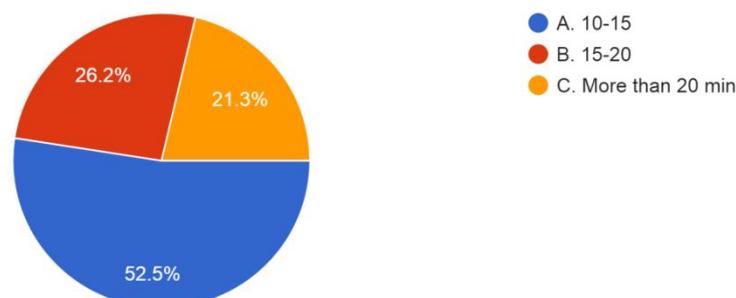
**Interpretation**

According to analysis, the majority of 50% respondents says that it takes 10-20 minutes overall waiting time in billing department.

Q14. Time spent by patient in collection of reports

- A. **10-15 min**
- B. **15-20 min**
- C. **More than 20 min**

14. Time spent by patient in collection of reports
61 responses



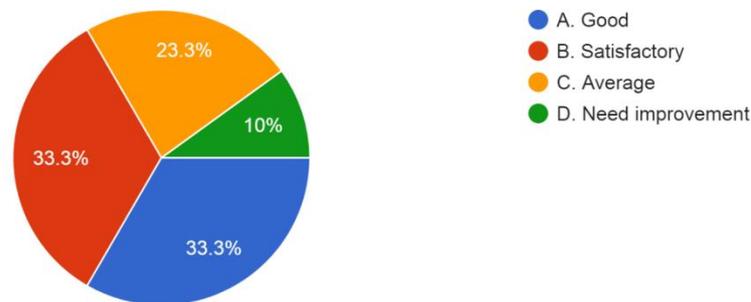
Interpretation

According to analysis, the majority of 52.5% respondents 10-15 minutes time spend by patient in the collection of reports.

Q15 Punctuality of staff in attending to patient needs

- A. Good**
- B. Satisfied**
- C. Average**
- D. Need improvement**

15. Punctuality of staff in attending to patient needs
60 responses



Interpretation

According to analysis, 33.3% respondents found good punctuality of staff in attending to patient needs, 33.3% satisfied, 23.3 says average punctuality and 10% says they need improvement to attend the patient needs.

FINDINGS

- According to the above graph there are 85.7% patients are age between 20-30 years, 7.9% clients' age between 30-40 years, 3.2% employee between 50-60 year, and 3.2% age above 60 years.
- In the above chart there are 60.3% of male patient and 39.7% of female patient according to survey
- In above pie chart there are 82.5% patient are single and 17.5% patients are married according to survey.
- According to above graph 46% Patient work doing in private company 19% have other occupation 9.5% working in public company 15.9% patient have their own business.
- According to the above graph 58.1% patients said maximum time taken for registration 10 min, 32.3% patients said registration time taken between 10 to 20 minutes, and 8.1% said more than 30 minutes time taken for registrations.

- According to data analysis 43.5% patients said 10 min time taking for complete the procedure 27.4% people said time taking for complete procedure 10 to 20 min, and 29% patients said overall time taken for complete procedure more than 30 minutes.
- According to above data analysis 32.3% patients said time taken for medical advice and treatment 10 minutes, 27.4% said time taken between 10-20 minutes for the medical advice and treatment, 27.4% said more than 30 minutes time taken for medical advice and 9.7% said that 1 hrs time take for medical advice and treatments.
- According to 55.6% patients they said medicine provide for single patient time taken 10 minutes, 28.6% patient said time taken between 10 to 20 minutes for providing medicine of single patient, and 14.3% said time taking more than 30 minutes for providing medicine to single patients.
- According to analysis we can see in pie chart 49.2% patients said 10 min time taking for billing the medicine, 36.5% patient said that time taking for billing the medicine between 10 to 20 minutes, and 11.1% patient said that more than 30 minutes time taking for billing the medicine.
- According to analysis, the majority of 50% respondents says that it takes 10-20 minutes overall waiting time in billing department.
- According to analysis, the majority of 57.1% respondents satisfied with the overall sevice provided by the hospital.
- According to analysis, the majority of 42.9% respondents have telephonic appointment source of register for diagnosis.
- According to analysis, the majority of 50% respondents says that it takes 10-20 minutes overall waiting time in billing department.
- According to analysis, the majority of 52.5% respondents 10-15 minutes time spend by patient in the collection of reports.
- According to analysis, 33.3% respondents found good punctuality of staff in attending to patient needs, 33.3% satisfied, 23.3 says average punctuality and 10% says they need improvement to attend the patient needs.

• **CONCLUSION**

The mean waiting time was calculated in OPD for various departments from the survey collected. Regarding the waiting time in various hospitals the patients were dissatisfied with only limited staff provided for diagnosis which can be improved by increasing the number of staff. The registration department has the confusion case registration hence online appointments can be implemented and the number of staffs can be increased by providing proper training about the administration. The patients were satisfied in diagnosis and pharmacy departments with the services provided to them. The delay in billing department is because time taken to get the lab reports which can be reduced by increasing the number of staffs in the laboratory and radiology department. Overall 62% of the patients were satisfied with the services provided by the hospital.

BIBLIOGRAPHY

- Zhu Zhecheng (2002). Health Services & Outcomes Research, Singapore Heng Bee Hoon Health Services & Outcomes - Research Reducing Consultation Waiting Time and Overtime in Outpatient Clinic: Challenges and Solutions, Chapter 11,
- C A Stone, J H Palmer, P J Saxby, and V S Devaraj (2000). The Impact of Engagement Processes on the First-appointment Attendance Rate at a Regional Outpatient Psychological Trauma Service.
- Ravikant Patel, Hinaben R. Patel (March 2017) International Journal of Community Medicine and Public Health, Valsad, Gujarat, India - A Study On Waiting Time And Out-Patient Satisfaction At Gujarat Medical Education Research Society Hospital Vol 4, Issue 3, Page 857
- Dr (Brig) Anil Pandit, Er Lalit Varma Dr.Amruta. (August 2016) P.Health Science E-ISSN No : 2454-9916 - Impact of OPD Waiting Time On Patient Satisfaction, Volume : 2, Issue : 8.
- Prof. Dinesh T.A, MHA, Ph.D. Prof. Dr. Sanjeev Singh, DCH, M.Phil. Prem Nair, MBBS, MD Remya T R, (2013). MHA Amrita Institute of Medical Sciences and Research Centre, Amrita Vishwa Vidyapeetham (Amrita University), Cochin, Kerala - Reducing Waiting Time in Outpatient Services of Large University Teaching Hospital - A Six Sigma Approach, Management, vol 17.
- V. Gijoa*†and Jiju Antony (17 July 2013). Published online in Wiley Online Library - Reducing Patient Waiting Time in Outpatient Department Using Lean Six Sigma Methodology.
- Mohebbifar R, Hasanpoor E, Mohseni M, Sokhanvar M, Khosravizadeh O, Mousavi Isfahani H.(Nov 10 2013) Glob J Health Sci.- Outpatient Waiting Time In Health Services And Teaching Hospitals: a case study in Iran, 6(1):172-80
- Fenghueih Huarng, Mong Hou Lee, (1996), Using Simulation In Out Patient Queues: A Case Study, International Journal of Health Care Quality Assurance, Vol. 9 Issue: 6, pp.21-25,

WIBLIOGRAPHY

- <http://www.google.co.in>
- <http://www.google scholar.co.in>
- <http://Wikipedia.co.in>

QUESTIONNAIRE

1. Age of the patient

- (A) 20-30
- (B) 30-40
- (C) 40-50
- (D) 50-60

2. Gender of the patient

- (C) Male
- (D) Female

3. Marital status of the patient

- (C) Married
- (D) Unmarried

4. Occupation of the patient

- (E) Private
- (F) Public
- (G) Business
- (H) Other

5. Maximum time taken for registration

- (D) 10 min
- (E) 15-20 min
- (F) More than 30 min

6. Overall time taken to complete the procedure

- (D) 10 min
- (E) 10-20 min
- (F) More than 30 min

7. Maximum waiting time for medical advice/treatment

- (E) 10 min
- (F) 10-20 min
- (G) More than 30 min

(H) 1 hrs

8. Time taken to provide medicine for single patient

(D) 10 min

(E) 10-20 min

(F) More than 30 min

9. Time taken for billing the medicine

(E) 10 min

(F) 10-20min

(G) More than 30 min

(H) 1 hrs

10. Overall waiting time in billing department

(E) 15-20 min

(F) More than 30 min

(G) 1 hrs

(H) More than 2 hrs

11. Overall service provided by the hospital

(E) Dis-satisfied

(F) Neutral

(G) Satisfied

(H) Highly satisfied

