Internship Training

at

W Pratiksha, Gurugram

Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time

by

Surabhi Pandey

PG/18/083

Under the guidance of

Ms. Divya Aggarwal
Asst. Prof. & Asst. Dean -Academics

Post Graduate Diploma in Hospital and Health Management

2018-20

International Institute of Health Management Research
New Delhi

IIHMR DELHI

PRATIKSHA HOSPITAL

The certificate is awarded to

Surabhi Pandey

in recognition of having successfully completed her
Internship in the department of

Out Patient Department (OPD)

and has successfully completed her Project on

Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time

5th Feb to 30th May 2020

At

W Pratiksha, Gurugram

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish her all the best for future endeavors.

Quality Coordinator
W Pratiksha Hospital, Gurugram

Tamanna Khan

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Surabhi Pandey** student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at **W Pratiksha Hospital, Gurugram** from **5th Feb 2020 to 15th May 2020**.

The Candidate has successfully carried out the study designated to her during internship training and her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements. We wish her all success in all her future endeavors.

Dr. Pradeep K Panda

Dean Academics and Student Affairs
IIHMR, New Delhi

Ms. Divya Aggarwal

Assistant Professor and
Assistant Dean- Academics &
Student Affairs, IIHMR, New Delhi

Certificate of Approval

The following dissertation titled

"**Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time"**

at

"W Pratiksha Hospital, Gurugram"

is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	**Signature**
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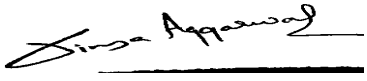
Dr. Preetha G.S	_____
Ms. Divya Aggarwal	
Dr. Sumesh Kumar	_____

Certificate from Dissertation Advisory Committee

This is to certify that **Ms. Surabhi Pandey,** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled "**Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time**" at "**W Pratiksha Hospital, Gurugram**" in partial fulfillment of the requirements for the award of the Post- Graduate Diploma in Health and Hospital Management. This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Ms. Divya Aggarwal

Assistant Professor and Assistant Dean
Academics & Student Affairs
IIHMR, New Delhi

Ms. Tamanna Khan

Quality Coordinator
W Pratiksha Hospital, Gurugram

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled

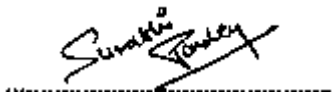
"**Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time"**

Submitted by **Ms. Surabhi Pandey**
Enrollment no. **PG/18/083**

Under the supervision of **Ms. Divya Aggarwal**, **Assistant Professor and Assistant Dean Academics, IIHMR Delhi** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 5th Feb 2020 to 15th May 2020 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature-

Ms. Surabhi Pandey



FEEDBACK FORM

Name of the Student: **Ms. Surabhi Pandey**

Dissertation Organization: **W Pratiksha Hospital, Gurugram**

Area of Dissertation: **Quality Management in W Pratiksha: An Observational study to assess Patient Waiting & Consultation Time**

Attendance: **Adequate**

Objectives achieved: **Yes**

Deliverables: **Adequate and in depth analysis of various critical parameters related to OPD TAT management, supported by logical & Implementable inputs.**

Strengths: **A very committed, sincere, diligent, cooperative & positive natured individual with strong drive and zeal for mutual learning.**

Suggestions for Improvement: **Nil**

Tamanna Khay

Quality Coordinator
W Pratiksha Hospital, Gurugram

Date: 11th June 2020
Place: Gurugram, New Delhi

Acknowledgement

First and foremost I would like to thank The Almighty GOD whose grace makes all the things possible the satiation and euphoria that accompany the successful completion of the project would be incomplete without the mention of the people who made it possible.

I would like to take the opportunity to thank and express my deep sense of gratitude to my faculty supervisor **Ms. Divya Aggarwal (Asst. Prof & Asst. Dean Academics)** and mentor my hospital supervisor and mentor **Ms. Tamanna Khan (Quality Coordinator)**, and my dear senior and guide **Dr. Jyoti Rama Das (Co-Founder & Managing Partner at Integra Ventures)** . I am greatly indebted to them for providing their valuable guidance and time at all stages of the study, their advice, constructive suggestions, positive and supportive attitude and continuous encouragement, without which it would have not been possible to complete the project.

I owe my whole hearted thanks and appreciation to the entire staff of the hospital, OPD department, & nursing department.

Last but not least I am extremely grateful to my parent for their love, prayers, caring and scarifies for educating and preparing me for my future.

I hope that I can build upon the experience and knowledge that I have gained and make a valuable contribution towards community in coming future.

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List of Abbreviations

CGHS	Central Govt. Health Scheme
CSSD-	Central Sterile Supply Department
GI	Gastrointestinal
IT	Information Technology
NABH	National Accreditation Board for Hospitals and healthcare
UHID	Unique hospital identification
ER	Emergency
HDU	High Dependency Unit
ECG	Electrocardiogram
GDA	General Duty Assistant
MRD	Medical Record Department
OT	Operating Theatre
HIS	Hospital Information System
ICU	Intensive Care Unit
OPD	Out Patient Department
SICU	Surgical Intensive Care Unit

Executive Summary

This is an attempt to know that how theories can be applied in a practical situation. This is the report which is based on the 4 weeks internship program that I had successfully completed in W-Pratiksha Hospital under Quality department from 21-02-2020 to 31-03-2020 as a requirement of my MBA program. As being completely new to practical, corporate world setting, every hour spent in the hospital gave me some amount of experience all the time all of which cannot be explained in words. But nevertheless, they were all useful for my career.

In the first part of the project the general information of the company has been collected, information is gathered through primary and secondary sources as well.

In the second part of the subject contains the specialised subject of study or the main project.

The sample collection was started from 22nd Feb 2020, after the submission the project entitled "To understand the role and functioning of Quality department and to identify discharge process and its improvement" The study included the sample collection from the OPD. I have collected 105 samples.

This report includes how a quality department works, what are the possible division and work distribution in a quality department i.e. Audit, incident reporting, RCA, CAPA, how to maintain quality in every department as quality is an important parameter for satisfaction and making workflow easier for everyone.

In the beginning of my study, I was made aware of certain terms followed by that I was instructed to analyse the process and functioning of OPD functioning of the process of OPD department which was then considered as my main project for my internship training.

After the observation from the second week I was asked to be on the floor and collect the data related to Discharge process with the intention to use it, to see and report the proper functioning of the OPD. Along with that, observation were to be done in order to identify the root causes of the long waiting time in the OPD.

My personal views about the Project, my value addition to the Project are also included in the report. With limited knowledge and experience I tried my best to make this report as much understandable as possible and translated the real-world experience into a document.

Before drawing any conclusion based on this report it may be noted that the report was prepared in a very short term. But still the report may be useful for designing any further study to evaluate the Quality of the hospital.

Chapter 1- About the Hospital

W Pratiksha Hospital, the flagship hospital of **Pratiksha Group** is a one-of-its-kind facility in Gurgaon that brings to you **25 years of experience** in treating thousands of happy patients across multiple hospitals and clinics in India.

W Pratiksha are committed to setting benchmarks in healthcare, by comprehensively catering to health requirements through various stages of life. Managed by **passionate clinicians**, our programs have been shaped by individual's voices and needs. Equipped with **state-of-the-art technology, luxurious ambience** and a **home-like environment**, we endeavour to serve every individual's needs.

W Pratiksha offers a touch of warmth, the highest regard for patient privacy and transparent billing practices which has earned us our patients' trust. We ensure that this quality care comes to you at the most affordable cost, in the most easily accessible city in India. A plethora of stay options to suit every pocket; along with all the delights of multi-cultural north India and exotic places to travel to, further makes us the preferred destination for domestic and international patients. It is a 110 bed hospital where we provide best treatment to the in patient.

W Pratiksha provide advance and service in the field of Cosmetic Gynaecology, Breast Disease & Cancer, Critical Care, Infertility & IVF, Adolescent Medicine, Cardiology, Gastroenterology, ENT, Internal Medicine, Minimal Invasive Gynae Surgery, Geriatric Medicine, Audiology & Speech Therapy, Neurology, Nutrition & Dietetics, Obstetrics, Oncology, PICU, NICU, Radiology & Imaging, etc. The hospital is excelling in IVF, Orthopaedics, Oncology, Gynaecology, Dermatology and Maternity.

W Pratiksha hospital is managed by passionate clinicians; our programs have been shaped by patients' voices and needs.

Achievements

Last year alone, our hospitals have treated more than 25,000 people, provided more than 1,500 IVF Treatments, 6,000 Joint Replacements, 5000 Arthroscopic ACL Reconstruction, managed more than 2,000 births and provided critical care for nearly 1,000 premature and sick new borns.

Promise

At W Pratiksha Hospital, we aspire to provide the utmost care to patients' and help them attain a state of complete wellness – physical, mental and emotional. We promise to uphold our standards of medical excellence, innovation, patient centric approach and transparent practices that have made Pratiksha a trusted name in healthcare.

Vision

We aspire to be the most reputed and trusted healthcare brand in the country, recognised for clinical excellence, innovation and compassion.

Management Team

Dr. Pramod Kumar Sharma, chairman, is one of the pioneers of IVF treatment in east India and one of its most successful practitioners. He established the Pratiksha hospital Guwahati, the Pratiksha group's first hospital in 1995. He delivered the group's first IVF baby on 13th February 1997 and was also the first in East India to deliver a test tube baby successfully from a frozen embryo. Dr. Sharma earned a Bachelor of Medicine & Bachelor of Surgery (MBBS) from Assam Medical College in the year 1986 and completed his Post Graduation from the Department of Obstetrics and Gynaecology, Guwahati Medical College in the year 1990.

Nishant Bajaj is the Chief Executive Officer of W Pratiksha Hospital. He has been responsible for developing the project from ground-up. He has rich experience in healthcare across delivery and consulting. He is the founder of Integra Ventures, a healthcare consulting firm which has a broad client base. He has also been the Chief Operating Officer for Srishti Hospitals. Earlier in his career, Nishant has worked with Goldman Sachs with their commodities trading division in New York and London. He holds an MBA from INSEAD Business School and a Masters in Computer Science from the University of Southern California.

Patient's Rights and Responsibilities Encouraged by W Pratiksha Hospital, Gurgaon

- **Patient's Rights-**
  - Every Patient has the right to guaranteed, competent high quality care and treatment given with respect and dignity.
  - Patients have the right to be informed about new developments pertaining to their care, as they occur.
  - Patients have a right to be informed about the diagnosis of their problems.
  - Patients have a right to be able to change their mode of treatment and hospital if they so desire in consultation with their physician.
  - Patients have a right to be informed, in specific terms, about what to do in case of emergency.
- **Patient's Responsibilities-**
  - Patients are responsible for following hospital policies and procedures.
  - Patients are responsible for careful use of hospital supplies and property.
  - Patients are responsible for valuable personnel effects brought to the hospital.
  - Patients are responsible for addressing their concerns and must raise any questions which they might have about their care.
  - Patients are encouraged to give encouragement and support to other patients.

Services at W Pratiksha Hospital, Gurgaon

The department offers laparoscopic surgery for removal of tumours and cysts through key-hole incisions including high-end surgical solutions for management of complex gynaecological disorders and hysteroscopy surgery for uterine disorder, intra-uterine fibroids and adhesions. Our areas of expertise include treatment for:

- Abnormal uterine bleeding & menstrual disorder like fibroid, endoinetriosis
- Tumours like ovarian cyst & malignancies
- Vaginal Infections
- Urinary incontinence (leaking)
- PCOS

The department offer personalised care to your journey towards motherhood from conception to delivery & beyond. We believe in holistic Obstetric care to achieve goal of healthy mother & healthy baby. Our areas of expertise include:

- Round the clock availability of obstetricians & gynaecologist
- Painless deliveries with epidural analgesia/ Entonox
- High dependency care for high risk pregnancy
- Continuous electronic monitoring

Pregnancy Care

- Preconception advise
- Antenatal care & postnatal care
- Post-Partum domiciliary care & visits

High Risk Pregnancy Care

- Gestational diabetes mellitus (GDM)
- Pregnancy induced hypertension (PIH)
- Bad obstetric history (BOH)
- Pre-term labour & cervical encirclage
- Placenta previa
- Twin or multiple pregnancy
- Pregnancy with medical disorders & comorbidities
- RH -ve pregnancy
- IUGR

Care of Pregnancy loss

- Ectopic pregnancy & missed abortion

Infrastructure of W Pratiksha Hospital, Gurgaon

1. The infrastructure and equipment's at W Pratiksha Hospital has been set-up to the highest specifications to ensure the comfort of both our medical team and our clients.

    - Luxurious LDRP Suite with foetal tocho cardiograph & ergonomic bed for delivery.
    - Tertiary Level III Neonatal Intensive Care Unit (NICU).
    - High-end integrated Gynaecological examination chair with an integrated high-resolution digital video colposcope and LCD monitor.
    - Modular Operation Theatres for pregnancy procedures and gynaecological related surgeries.
    - A day care unit is available for same day surgical procedure.
    - Uroflowmetry for diagnosis of urinary problems.
    - Excellent patient comfort.

2. Clinics and Programs
    - We have created specialized clinics to address and give focused attention to certain conditions.
    - Menopausal clinic
    - PCOS & androgen excess clinic
    - Preventive oncology
    - Adolescent health
    - Recurrent pregnancy loss
    - Gestational diabetes (GDM clinic)

3. Nurturing Birth Programs
    - Educational program to understand your pregnancy
    - Yoga
    - Antenatal exercises
    - Postnatal exercises
    - Psychology sessions
    - Diet counselling
    - Lactational counselling

4. Painless Delivery
    - Epidural analgesia
    - TENS
    - ENTONOX
    - Hypno birthing
    - Post-partum blues and depression
    - Stress Management

Snapshots of hospital services/facilities-

1.1 About NABH

National Accreditation Board for Hospitals and Healthcare Providers (NABH) is a constituent board of Quality Council of India (QCI), set up to establish and operate accreditation programme for healthcare organizations. NABH has been established with the objective of enhancing health system & promoting continuous quality improvement and patient safety.

NABH provides accreditation to hospitals in a non-discriminatory manner regardless of their ownership, legal status, size and degree of independence. NABH is a member of ISQua Accreditation Council.

ISQua is an international body which grants approval to Accreditation Bodies in the area of healthcare as mark of equivalence of accreditation program of member countries.

Hospital Accreditation

In India, Heath System currently operates within an environment of rapid social, economic and technical changes. Such changes raise the concern for the quality of health care. Hospital is an integral part of health care system. Accreditation would be the single most important approach for improving the quality of hospitals.

Accreditation is an incentive to improve capacity of national hospitals to provide quality of care. National accreditation system for hospitals ensure that hospitals, whether public or private, national or expatriate, play their expected roles in national health system.

Benefits of Accreditation

Benefits for Patients

Patients are the biggest beneficiary among all the stakeholders. Accreditation results in high quality of care and patient safety. The patients are serviced by credential medical staff. Rights of patients are respected and protected. Patients satisfaction is regularly evaluated.

Benefits for Hospitals

Accreditation to a hospital stimulates continuous improvement. It enables hospital in demonstrating commitment to quality care. It raises community confidence in the services provided by the hospital. It also provides opportunity to healthcare unit to benchmark with the best.

Benefits for Hospital Staff

The staff in an accredited hospital is satisfied lot as it provides for continuous learning, good working environment, leadership and above all ownership of clinical processes. It improves overall professional development of Clinicians and Para Medical Staff and provides leadership for quality improvement with medicine and nursing.

Benefits to paying and regulatory bodies

Finally, accreditation provides an objective system of empanelment by insurance and other third parties. Accreditation provides access to reliable and certified information on facilities, infrastructure and level of care.

Organizational Structure

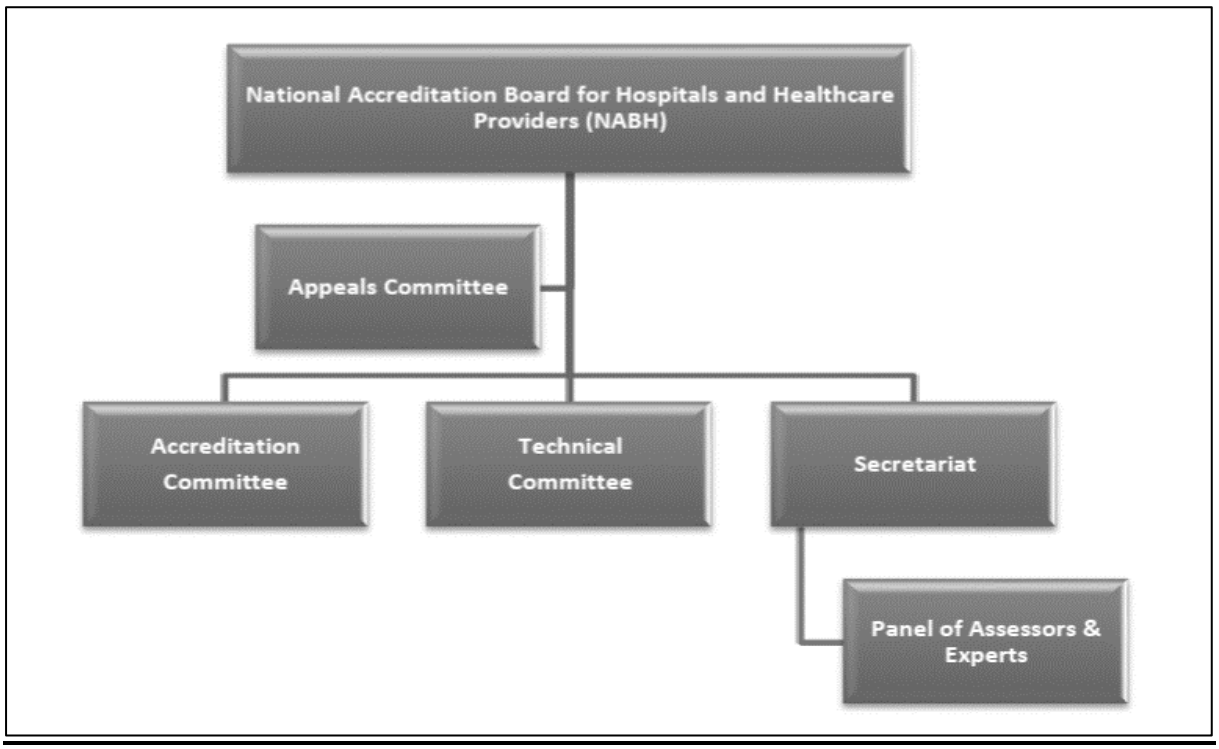


Figure 1 Organizational Chart of NABH

NABH Standards

NABH Standards for hospitals prepared by technical committee contains complete set of standards for evaluation of hospitals for grant of accreditation. The standards provide framework for quality of care for patients and quality improvement for hospitals. NABH Standards has ten chapters.

Outline of NABH Standards

Patient Centered Standards	Organization Centered Standards
Access, Assessment and Continuity of Care (AAC)	Continuous Quality Improvement (CQI)
Care of Patient (COP)	Responsibility of Management (ROM)
Management of Medication (MOM)	Facility Management and Safety (FMS)
Patient Right and Education (PRE)	Human Resource Management (HRM)
Hospital Infection Control (HIC)	Information Management System (IMS)

Figure 2 Outline of NABH Standard

1.2 About Quality

Quality must be understood before it can be managed. Although people deal with it every day, there is no conclusive definition of quality. Like beauty, quality exists in the eye of the beholder. For instance, to a manufacturer, a quality product is one that conforms to design specifications have no defects and performs to the standards customers expect. To retailers, a quality product is one that has a good combination of price and features and appeals to many customers. To consumers, a quality product is one that meets their individual expectations. What one person perceives to be a quality product might not be considered a quality product to another person. In its broadest sense, quality is an attribute of a product or service. The perspective of the person evaluating the product or service influences his or her judgment of the attribute. Although no universally accepted definition of quality exists, its various definitions share common elements:

- Quality involves meeting or exceeding customer expectations.
- Quality is dynamic (i.e., what is considered quality today may not be good enough to be considered quality tomorrow).
- Quality can be improved.

Healthcare Quality:

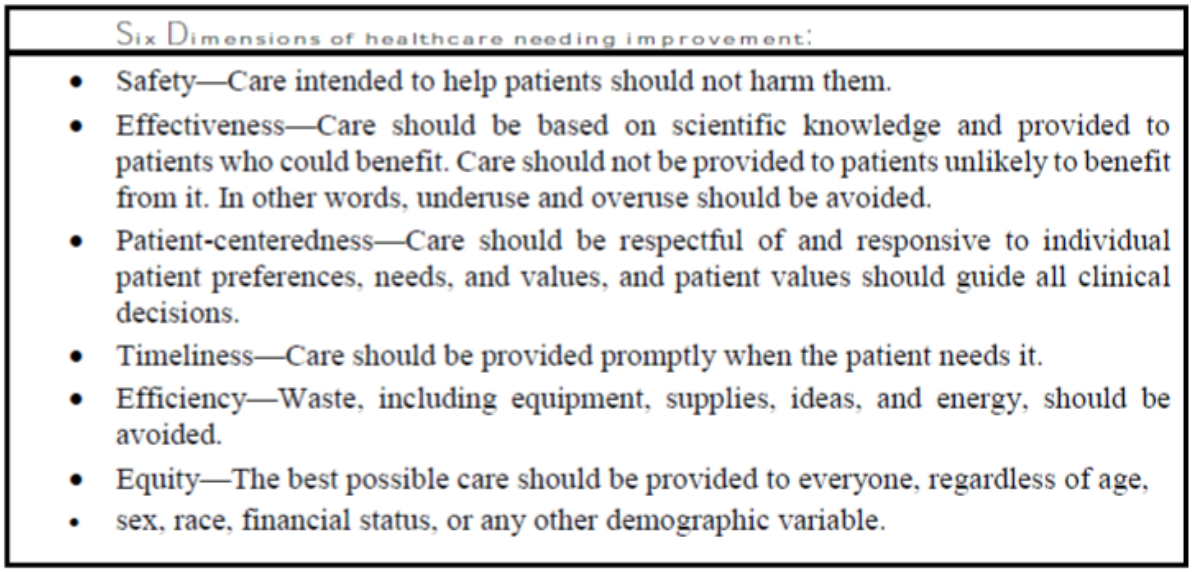
There are three groups which are mostly affected by this question:

- consumers
- purchasers
- providers

Consumers that are the Patients want to receive the right treatments and experience good outcomes. Everyone wants to have satisfactory interactions with care providers. Plus, consumers want the physical facilities where care is provided to be clean and pleasant, and they want their doctors to use the best technology available. Consumer expectations are only part of the definition, however. Purchasers and providers may view quality in terms of other attributes.

Purchasers are individuals and organizations that pay for healthcare services either directly or indirectly. If you pay out-of-pocket for healthcare services, you are both a consumer and a purchaser. Purchaser organizations include government-funded health insurance programs, private health insurance plans, and businesses that subsidize the cost of employees' health insurance. Purchasers are interested in the cost of healthcare and many of the same quality characteristics important to consumers. People who are financially responsible for some or all their healthcare costs want to receive value for the dollars they spend. Purchaser organizations are no different. Purchasers view quality in terms of cost-effectiveness, meaning they want value in return for their healthcare expenditures.

Providers are individuals and organizations that provide healthcare. Provider individuals include doctors, nurses, technicians, and clinical support and clerical staff. Provider organizations include hospitals, skilled nursing and rehabilitation facilities, outpatient clinics, home health agencies, and all other institutions that provide care.


Six Dimensions of healthcare needing improvement:

- Safety—Care intended to help patients should not harm them.
- Effectiveness—Care should be based on scientific knowledge and provided to patients who could benefit. Care should not be provided to patients unlikely to benefit from it. In other words, underuse and overuse should be avoided.
- Patient-centeredness—Care should be respectful of and responsive to individual patient preferences, needs, and values, and patient values should guide all clinical decisions.
- Timeliness—Care should be provided promptly when the patient needs it.
- Efficiency—Waste, including equipment, supplies, ideas, and energy, should be avoided.
- Equity—The best possible care should be provided to everyone, regardless of age,
- sex, race, financial status, or any other demographic variable.

Figure 3 Six Dimensions of healthcare needing Improvement

Quality Management Activities:

Quality management may appear to be a difficult while undertaking. Quality management involves measurement, assessment, and improvement—things people do almost every day. The three primary quality management activities—measurement, assessment, and improvement-are parts of a closely linked cycle Healthcare organizations track performance through various measurement activities to gather information about the quality of patient care and support functions. Results are evaluated in the assessment step by comparing measurement data to performance expectations. If expectations are met, organizations continue to measure and assess performance. If expectations are not met, they proceed to the improvement phase to investigate reasons for the performance gap and implement changes based on their findings. The quality management cycle doesn't end at this point, however. Performance continues to be evaluated through measurement activities.

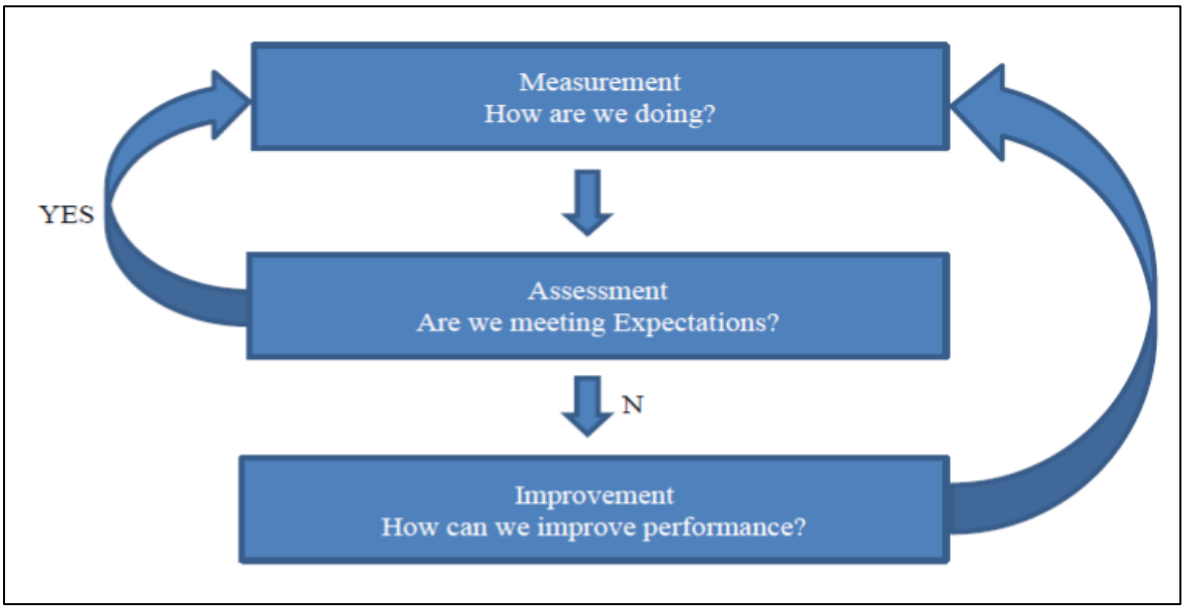


Figure 4 Activities for Quality Management

Roles and Responsibilities of Quality Department.

The responsibilities will vary and depend on the sector. However, as a quality manager or executive they typically need to do:

- Revise and establish a company's quality procedures, standards and specifications.
- Review Patients requirements and make sure they are met to standards.
- set standards for quality as well as health and safety.
- Make sure that different processes meet with NABH standards.
- look at ways to reduce waste and increase efficiency. • Define quality procedures in conjunction with operating staff.

- Use relevant quality tools and make sure managers and other staff understand how to improve the quality of the Hospital.
- Review existing policies and make suggestions for changes and improvement. • Set up and maintain controls and documentation procedures.
- To conduct Audit of different departments.
- Monitor performance by gathering relevant data and produce statistical reports.

Quality also depends on the word of mouth of patients. It is the duty of the hospital that the patient leaves the hospital satisfied and happy with the treatment. Patient will be happier and more satisfied if nothing unpleasant happened with them during their treatment and stay at the hospital. It is often seen that an unexpected or desired mishap penning occurs with the patient at the hospital which led to some physical harm. Such unexpected mis happening which occurred with the patient is known as Incident

Incident

An Event that results from a deviation from a system, process or procedure which may affect the

- Safety, purity, potency or effectiveness of the product or service.
- Health or safety of a donor, product recipient, member of staff/public.
- Trace ability of records.
- This event may have been identified either prior to or after distribution of a product or service.

Incident Reporting:

Incident reporting is a process improvement tool that is used to identify problems, analyse the cause, develop solutions, execute the solution and track the effectiveness. It is widely recognised as an important method for improving safety in healthcare.

NOTE: The Incident should be reported to the quality department within 24hours.

Types of Incident:

- Near Miss
- Adverse
- Sentinel

Near Miss:

An event or situation that could have resulted in an accident, injury or illness, but did not, either by chance or through timely interventions.

Adverse:

An unexpected and undesired incident directly associated with the care and services provided to the patient. The harm may or may not be caused. Adverse events may be preventable or non-preventable.

Sentinel:

- An unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof.
- Serious injury specifically includes loss of limb or function.
- "or the risk thereof" includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome.
- Such events are called "sentinel" because they signal the need for immediate investigation and response

Incident Reporting Process:

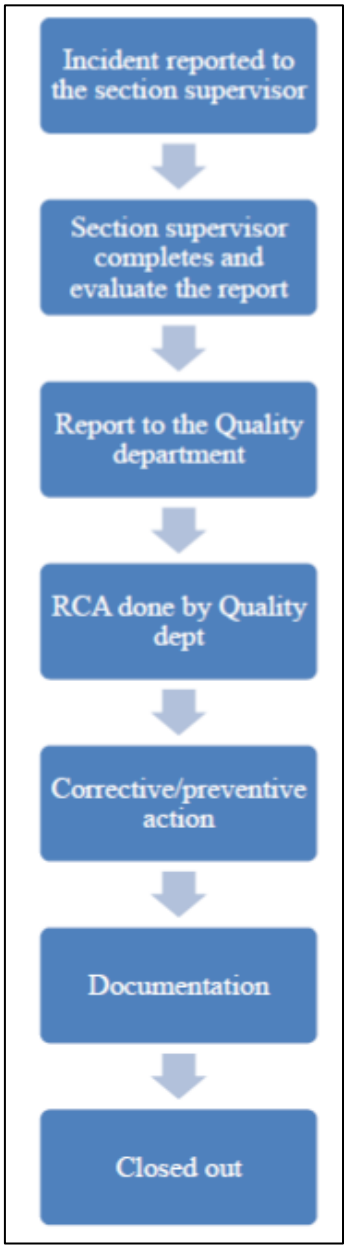


Figure 5 Incident Reporting Process

When an incident unexpectedly occurs at a healthcare organization, it leaves everyone wondering what possibly went wrong. The hospital staff and personnel start having doubts in their heads and they begin to question how such an unpleasant event occurred. They try to find the reason and cause of the incident so as to make amends, improve the standard of quality and try to make sure such incidents should not happen again. This can be done by using a specific application of quality. This application is known as Root Cause Analysis.

Root Cause Analysis.

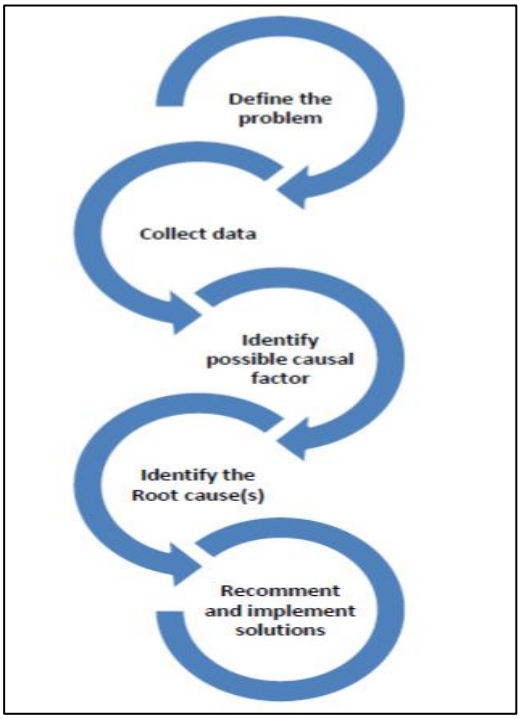
Introduction:

Root Cause Analysis (RCA) is a structured investigation that aims to identify the true cause of a problem and the actions necessary to eliminate it with a permanent fix rather than continuing to deal with the symptoms on an ongoing basis. The true root cause is difficult to determine immediately, it often takes analysis using one or more tools to separate it from the symptoms or masking factors. Root Cause Analysis determines what happened, why it happened, and how to eliminate it so it will not happen again.

RCA in Healthcare:

RCA is a comprehensive and systematic methodology to identify the gaps in hospital systems and the processes of health care that may not be immediately apparent, and which may have contributed to the occurrence of an event. RCA has been applied to the healthcare industry and has been found to be a highly effective tool to ‘improve patient care and reduce healthcare costs from adverse events.

The Root Cause Analysis Process



Key Performance Indicators.

When hospitals want to track their operational effectiveness beyond a shadow of a doubt, they turn to key performance indicators (KPIs). Learn more about nine important key performance indicators for hospitals as they

What Are KPIs?

In short, KPIs are measures or metrics organizations can use to concretely gauge their performance. As Investopedia writes, they "are used to determine a company's progress in achieving its strategic and operational goals, and to compare a company's finances and performance against other businesses within its industry." In healthcare, it's useful to break down KPIs into distinct categories, such as patient access, patient safety, OR use, ER use, infection control, patient satisfaction and financial.

KPIs are useful in assessing operations and setting goals, but they must meet a set of criteria to be truly useful to organizations. One popular way to quantify KPIs is using the SMART method, which dictates KPI-based objectives should be:

- Specific
- Measurable
- Assignable
- Realistic
- Time-Related

In other words, KPIs hold great power and insight for hospitals that can figure out a workable method for analysing performance data and setting benchmarks. Without order, KPIs never evolve from being rows of numbers in spreadsheets. Healthcare solutions for data analysis help decision-makers turn data into actual insights, which in turn fuels improvement.

Without further delay, let's look at nine specific KPIs that hospitals should consider tracking over time to evaluate their workflows in the hopes of making improvements.

Occupancy Rate

Are your beds routinely empty? Overbooked? The only way to keep things running smoothly is to track occupancy rate over time. From this KPI, you can make necessary adjustments to streamline efficiency.

Average Length of Stay

Hospitals can drill down into data to track how long patients stay after certain procedures or in certain departments. If stays are lengthy, hospitals should investigate possible causes (administrative oversight, infections, etc.). If the metric reveals short stays, hospitals should ensure patients are not being prematurely discharged

Infection Rates

Also known as healthcare-associated infection (HAI), this KPI shows how often patients get certain infections during medical treatment. A lower number demonstrates a hospital's commitment to following safety and sanitation guidelines.

Readmission Rate

The Affordable Care Act started readmission reduction programs in 2012 to incentivize hospitals to "reduce the number of costly and unnecessary hospital readmissions," and since then, this KPI has been more prominent than ever.

Patient-to-Staff Ratio

A contributing factor in making informed hiring decisions and ensuring patients are getting enough individual attention is to monitor the patient-to-staff ratio across departments.

Patient Wait Time

How long does a patient sit in the waiting room before getting medical care? Longer wait times mean lower patient satisfaction scores and a higher risk of injury or death.

Operating Margin

Hospitals operate on business models; it's important to track revenue versus expenditures to establish the health of margins.

Claims Denial Rate

Hospitals only stay in business if they get paid. As many as one in five claims is delayed or denied. Reducing claims denial rates saves time and energy while boosting revenue. The first step is developing a measurable claim denial KPI.

Patient Satisfaction

A low patient satisfaction number is a huge red flag for hospitals; it's a call for serious changes in staffing, training or facilities. Not only does a low score in patient satisfaction indicate that hospitals are alienating current patients, but it also suggests they're repelling future ones.

Measuring these nine important key performance indicators for hospitals will help your organization identify its strengths and weaknesses so it can set actionable goals.

Other than KPIs, the effective implementation of hospital policies requires the policies must reach the healthcare personnel with the authentic guidelines that were implemented by the quality department without any dilution or changes in the document and the policy. This can be done by putting a certain physical mark on the policy document which will help the hospital personnel to differentiate between the old document or the newly implemented document. Such a process which helps the hospital personnel to differentiate the original newly implemented document from the old one is known as Document Control.

Document Control-

The hospital guidelines lay emphasis on the need of document control in quality management. The standards foresee that employees and staff have all the information to perform their tasks efficiently based on a documented and controlled Quality Manual with standard operating procedures, work process instructions as well as forms altogether serving as guidelines for effective functioning of organization.

Document Control in Healthcare

Document control deals with the management and maintenance of information to create quality goods and services meeting customer satisfaction.

It ensures the most updates and newest relevant information is available to avoid errors which may disrupt the workflow or slow down the organization's work performance. Some of the

The Document Control Systems should also describe how changes are made, reviewed and approved with authority of retrieval. The documents must be easily available with full access to all personnel. The reviewing must be done by regular discussions with each department. It is the responsibility of all personnel from top management down to ensure document control.

DOCUMENT CONTROL PROCESS

Document control process includes the use of a Unique Document Control Number to identify the authenticity of the document. Along with that we also use a Unique Serial Number to specify the serial sequence of the document. This Unique Document Control Number is present on all the Forms and Policy Documents to identify its authenticity.

This Unique Document Control is implemented on all the policies during Policy Revision. In order to understand document control, we need to first study Policy Revision.

Policy Revision-

Policy revision deals with evaluating the existing policies in healthcare and after a careful reviewing by the authorities is carried on, the necessary edits are done and the upgraded policy is referred to as Policy Revision.

Policy Revision Process-

Policy revision process is done either every six months or annually. The process includes reviewing the previous annual policy followed by editing it with the necessary changes. The changes are then saved and the policy is considered to be revised. The revised policy is protected with the Document Control Number so as to identify it for its authenticity.

Chapter 2- Introduction

An outpatient department is the most important part of a hospital designed for the treatment of outpatients, people who have health problems and visit the hospital for treatment/Diagnosis but don't at that time require a bed or to be admitted for overnight care in Hospital. A modern outpatient department provides a wide variety of treatment services, diagnostic & investigation, imaging and minor surgical procedures**.**

As OPD being the first contact point between the hospital staff & patient, it should be start on time as it directly associated to the patient's satisfaction Improper timings of the OPD contribute to patient's negative perception and attitude towards hospital and their consultants. In the rapid growing healthcare industry every hospital tries hard to gain the market share edge. So, it is important to meet with the patient's need and their satisfaction level to survive in the market..
Hospitalization can be traumatic so proper service delivery as well as service delivery on time could lessen the patient's agony and moreover, this could 'add value' to patient satisfaction.

Patient Care-:

The most significant function of a hospital is to provide care of sick and injured patient and restoration of good health of Patients. Ethically, Care/service should be given to all patient without any prejudicial of social, economic or radical nature. The success with which a hospital contributes towards meeting the patient's need can be gauged by the management of the hospital. Outpatient is customer whom hospitals provide Curative, Diagnostic, Therapeutic or preventive service through the hospitals facilities and who at the time is not admitted as an inpatient of the hospital.

Outpatient-:

Out Patient Care/Service are the foremost service given by hospital as it gives the services to a large number of Customers at affordable cost. The utilization of many of the other services provided by the hospital, often depend on how satisfied the patient is with the outpatient services provided. According to report 8-10 per cent of Out-patients need hospitalization. A well organized and professionally run hospital, not only can such Out Patient Department help to avoid confusion, frustration and overspending by fearful patients but can also manage the flow of inpatients to the hospitals. An outpatient is a patient who is not admitted in hospital for stay in night but who visits a Hospital Out Patient Department. Out Patient Department is defined as a part of the hospital with provide physical and medical facilities and other staff in required number, with regular scheduled hours, to provide care for patients

Waiting Time-:

Patients waiting time has been defined as "The time duration from when a patient enters the outpatient department to the time of the patient leaves the Out Patient Department''.

OPD Patient Registration, Vital Assessment, Consultation, Diagnostic & Treatment Process-:

1. **Setting up an appointment**
    - Patient fixes up an appointment for OPD consultation or diagnostics over phone /Online Apps/walks in.
    - Appointment fixed in Tele med module
    - Patient visits the facility and is guided to the OPD counter for registration process.
2. **Patient registration and invoice generation**
    - Patient fills the registration form or gives details if already registered.
    - Patient details entered in HIS and registration number is generated for new patient.
    - Patient pay in cash/by card or credit bill raised in case of corporate patient.
3. **Patient Vital Assessment at Nursing Station**
    - After registration at the hospital reception/registration desk patient comes to the nursing station for vital assessment such as BP, blood sugar, height weight etc. before going for the consultation
4. **Patient consult/diagnosis & treatment**
    - Invoice handed over to the GDA and guided to the nursing counter
    - Nurse records patient's vitals which are followed by consultation with doctor.
5. **Patient visits labs/pharmacy/Radiology/admission counter**
    - Patient is informed about the data of collecting the report
    - Patient visits pharmacy if drugs prescribed by doctor
    - Patient visits admission counter in case referred indoor admission by doctor.
    - Patient visits to radiology department if USG/X-RAY/CT/MRI prescribed by doctor.

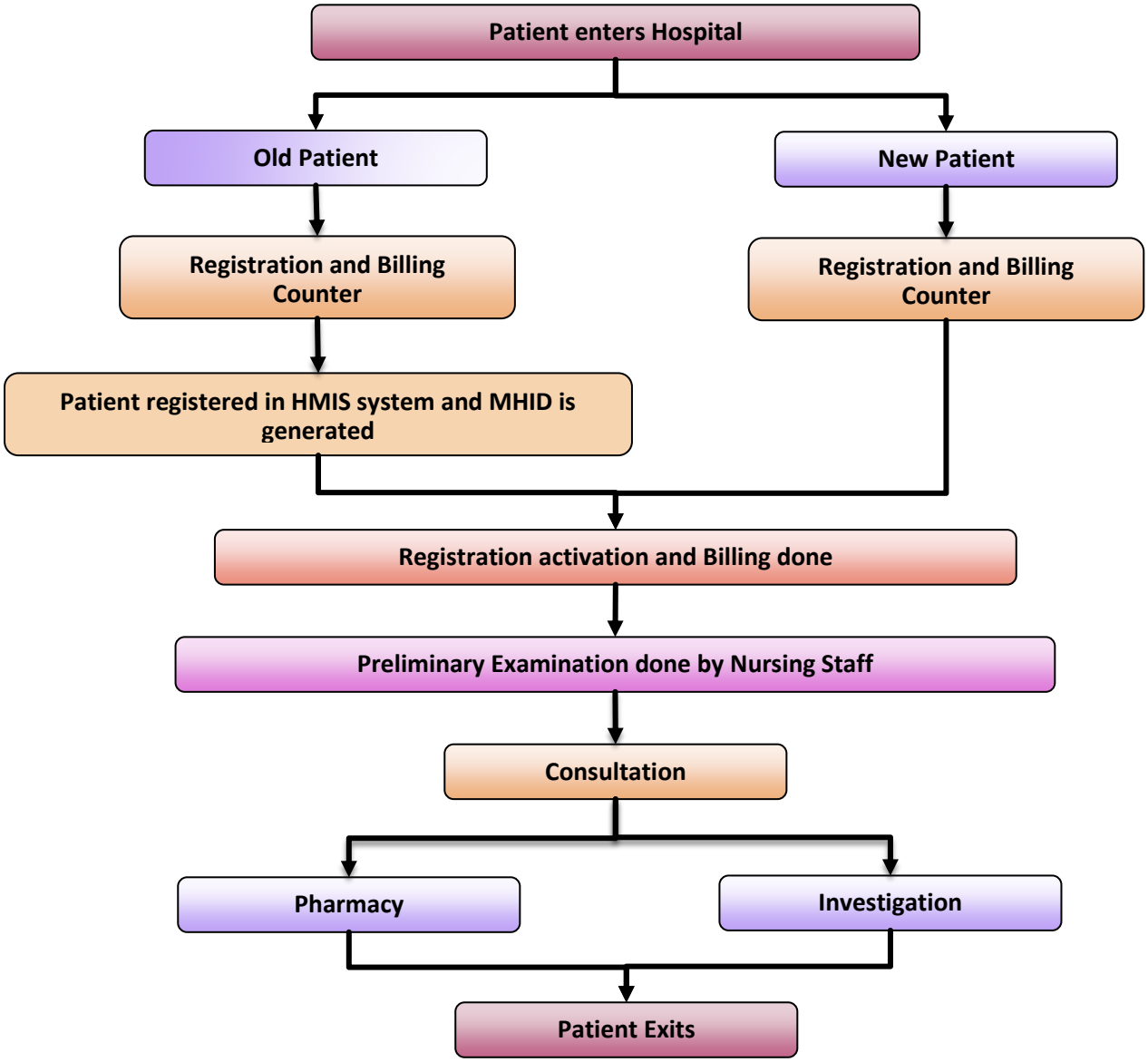


Figure 7 Process flow of OPD

Chapter 3- Review of Literature

OPD is defined as the most important component of the hospital which have physical and medical facilities with diagnostic, imaging, health checkup facilities and other staff in a required number, with regular scheduled hours, to provide care to the patients who are not admitted as in patients' area. The OPD forms the façade of the hospital and is invariably one of the foremost services provided by the hospital. It witnesses maximum footfall daily when compared to any other department in the hospital. These facts simply highlight the importance of efficient and effective OPD management. If run effectively, the OPD can lessen the burden on the inpatient department dramatically. One of the major problems faced by the hospital are waiting periods and overcrowding in a running out patient department.

According to (Bergenmar. et al, 2006), waiting time is expressed as a deliberate evaluation of the standard of service actually imparted against the individual's perceptions. Patients spend a large amount of time in hospitals waiting for healthcare to be delivered by doctors and other affiliated papa medical staff. Delayed provisioning of the intended services has a very adverse impact on the overall quality of care including time delays associated with diagnosis and final intervention given (Kenagy et al., 1999), it also adds to unavoidable cost burden on the patients and affiliated health system (Mesfin et al., 2010). The aspirations of the affected party thus can't be overlooked.

The Institute of Medicine (IOM) recommends that, at least 90% of patients should be seen within 30 minutes of their scheduled appointment time (O'malley et al., 1983). This is, practically not possible to achieve, since on ground a patients ends up spending around 120 to 240 minutes at the OPD to avail the desired service. (Ofilli et al., 2005). The satisfaction levels of patients is directly related to their experience at OPD wrt waiting times (Nabbuye-Sekandi et al., 2011). Many researchers today are singularly focusing on discovering ways and requisite care provisioning times are usually regarded as key indicators of standard of services being provisioned by the healthcare providers (MOH 2004, Nabbuye-Sekandi et al., 2011).

An analysis and research by a scholar wrt patient satisfaction at healthcare services being provided in Uganda in 2008 (Jessica et al., 2008) established that patients generally wait for much longer times on their own at the public utilities, before they are able to see the doctor. This was much higher than the acceptable time limit of 60 minutes. (Ministry of Health., 2004). Hence, there is an inevitable requirement to undertake a depth analysis on factors responsible for the enhances waiting time for the patients visiting the general OPD.

Impact of Waiting time on (QoS) & Sustainability of Competitive edge

Waiting time is a critical determinant of level of patient satisfaction achieved, since it snowballs into avoidable increase in the out of pocket expenditure of affiliated patients and has a negative

outcome on efficiency and proficiency of the care institute. (Haussman, 1970). There is a real battle to be won against all odds for achieving highest degree of professional and timely care with the restricted resources (Hall et al., 2001)

Waiting time in healthcare - Background

In the past years, healthcare providers and affiliated systems in place have undergone plethora of upgradation wrt queuing processes, where patients arrive and wait to get the desired services as per their perceptions and then depart (Fomundam and Hermann, 2007).

Queuing Theory

This model is known to as the single server single queue model as shown in figure 1. Single server model has a single server and only a line of patients (Krasewski and Ritzman, 1998). Here affected patients from that single line are likely to be catered for their medical needs through a singular server facility.

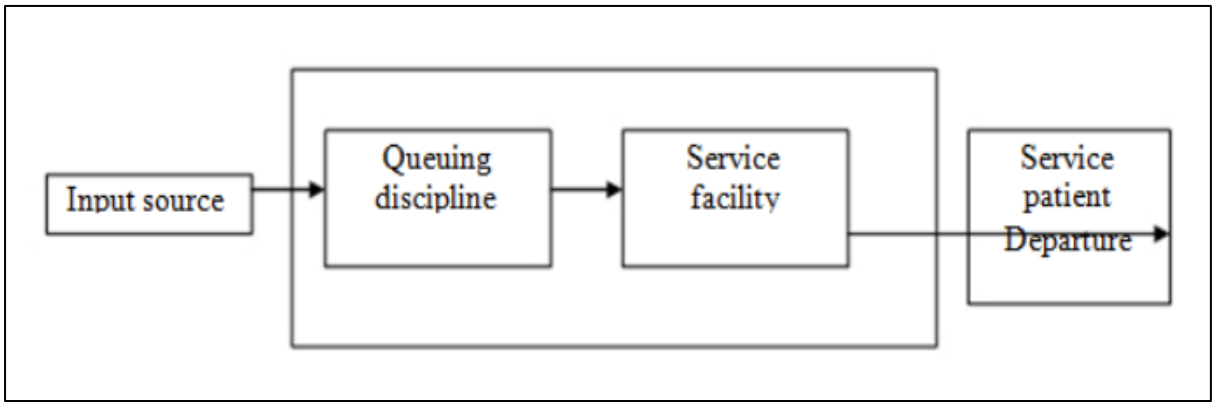


Figure 8 High level view of a basic queueing process

Source- (Obamiro, 2010)

Queue System

Queues are generally unlimited or limited (Hillier and Lieberman, 2001). An unlimited queue holds an infinite numbers of patients, which approach the queue. Unless specified otherwise, the accepted queuing model is assumed to be one holding an unlimited numbers.

Queue Discipline Management

Discipline of queue is pointing at the total number of persons standing in queue (Hillier and Lieberman, 2001). In almost all health agencies, if a prior appointment model is in place, the queue model is either first-in-first-out or a set of well and regulated methods. The model can different priorities set for variety of patients classes and structures.

Mechanism of service

Mosek and Wilson (2001), system has explained that what are the ways in which a patient is need to be looked after and served in a healthcare setting. Mostly, care provisioning times are erratic and they are never static.

Single Server System & Multiple-Phases System

Here in the model, a single queue is present, but clients get more than one kind of facility before actually exiting the queueing model as depicted in figure 2. At the OPD, patients firstly go to the registration counter, get the basic formalities completed and then again stand in the queue to observe a papa medical staff for additional support, before visiting the doctor.

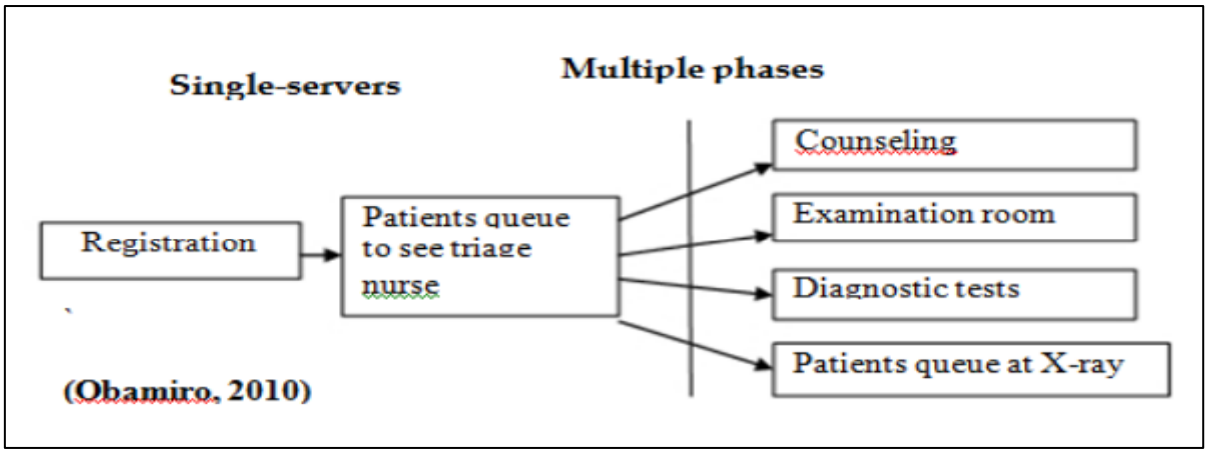


Figure 9 Queueing discipline showing a queue system

Factors associated with waiting time in a health facility

- **Patient/process flow model**

Bottlenecks in the smooth patient system can results in substantial increment in overall waiting time and can result in an adverse and unexpected outcome for health delivery systems in place (Vos et al., 2007). When patient flow is managed well, it is mostly reflected by the shorter wait times at billing, registration, investigations, pharmacy and final discharge process (Belson, 2010).

- **Operational Efficiency model**

After a healthcare provider has a clear knowledge about a patient flow model, these systems can than easily be replicated to achieve better and acceptable care delivery process. (Cote, 2000). Thus an effective patient flow model might be a great challenge to achieve to enhance the overall professional efficacy of the OPD (Kunders, 2004).

Emergence of bottlenecks in Outpatient departments

As per Wanyenze et al. (2010) a number of complex and dynamic issues are likely to affect the final desired proficiency. So thus problem factors need to be analyzed at the earliest and eradicated for enhancing the quality of services.

Problem statement

Higher OPD waiting time result in alarming level of dissatisfaction amongst mostly all the patients visiting the OPD services and can thus adversely affect name and reputation of the healthcare provider. Patients can even leave without getting proper care. (Omaswa, 1997)

The biggest impact of long waiting times is that it enhances the number of patients who would not like to visit the said healthcare facility again in their lifetimes (Stock et al., 1994, Fernandes et al., 1997). A study also established that among patients who left without being seen by a doctor, 40% actually required emergent medical care, and around 10% were subsequently admitted within next few days (Baker et al., 1991) and 55% of them out for better options elsewhere (Rowe et al., 2006)

Chapter 4- Research Design & Methodology

4.1 Rationale of the study

Being the first point of contact with a patient the general OPD serves as the window to any healthcare services provided to the community. The care in the OPD is indicative of the general quality of services (QoS) of the hospital and is reflected by the patients' satisfaction. This study can be effective in measuring/evaluating the gaps and the bottlenecks for long waiting time for the OPD services of W Pratiksha Hospital, Gurugram.

As quality is a prime component to foresee the research and analysis in almost all the fields, so it is important to study an overview of quality and its guidelines before beginning the research in any domain.

Long waiting time in hospital has always been the topic of research and there has been continuous striving to reduce the waiting times of the patients. It is the need of an hour in today's competitive world to achieve cent percent patient delight and to find the factors that cause long waiting time and try to rule out this factor

With the current effort to streamline the smooth functioning of OPD services at W Pratiksha Hospital, especially in context of OPD consultation TAT/Waiting time. The current study intends to analyse and identify points of delay & give hospital management/policy makers with logical suggestions and options for the Outpatient department (OPD) through a deliberate review of various processes in the hospital system.

A clear understanding of the factors affiliated with average waiting time at the hospital could help in deciding which all interventions will have the desired impact towards betterment of the patient flow in the hospital. Thus, controlling/reducing the average waiting times would help to achieve a decreased congestion in the hospital and simultaneously potentially increase the patient satisfaction.

4.2 Necessity of the study

- **Better patient flow to improve hospital performance**:

  The utmost importance of this study is that it will improve the flow of patient from OPD to other wards and will increase the hospital performance with better utilization and enhance the image of the hospital.

- **Access blocking and overcrowding**:

  Blockage of patients and overcrowding issues can be easily be understood and in return will help in improving patient flow by removing the factors blocking the patients flow and will reduce overcrowding.

- Enhanced expectations of OPD patients/visitors
- To focus on a patient centric approach.
- To lay due stress on accountability, cost effectiveness, sustainability through Continuous quality Improvement (CQI)
- Hospital performance assessment/audits are mandatory today as per NABH/NABL guidelines.
- To understand the complex & dynamic requirements of modern day healthcare services.
- To understand and establish the importance of monitoring & surveillance of healthcare services in hospitals.
- To maintain & retain the competitive edge.
- To achieve enhanced patient trust/satisfaction.
- For ensuring staff orientation & synchronization towards organizational vision, mission and goals.
- To attract, enhance, and retain international patients base.

4.3 Broad objectives including few supporting activities

- To observe & determine the flow of patients and average waiting times in the OPD of a Multi-speciality hospital through a Time motion study (Active observation).
- To quantify the waiting time and identify the factors & root problem areas/bottlenecks those are likely responsible for higher waiting times in OPDs.
- To recommend appropriate suggestions to optimize the waiting time in the OPD.
- To facilitate meaningful graphical display/view of desired analysis wrt hospital OPD services.
- To build a realistic & operational model of performance.
- To facilitate quicker decision making by the hospital management based on analysis.
- To be better prepared for external audits/validation at all times.

4.4 Research Questions

- How long do patients wait on an average to receive care at the hospitals?
- Where along the continuum of care of assessment do patients experience delays?
- What are the possible reasons that may lead to excessive patient waiting times?

4.5 Main objective

To quantify the waiting time and identify factors associated with waiting time for services being offered at the Outpatient Department at the hospital in order to come up with an evidence based analysis of ascertaining the realistic overall average waiting time and as also the mean waiting time (TAT) of various doctors of the OPD

4.6 Specific Objectives

- To quantify the mean waiting time and identify the factors & root problem areas , bottlenecks those are likely responsible for higher waiting time in OPD through root cause analysis..
- Measure and analyze the doctor wise average consultation & waiting time in the OPD of the hospital wrt the data captured on MS-Excel platform

- To recommend logical suggestions & interventions for optimization of the waiting time through an analysis of the reasons of OPD Turn Around Time (TAT) as captured actively by tracking the patients in OPD.

4.7 Methodology & Study Design

Observational & Descriptive study of following aspects:

- Observation, measurement and analysis of Mean/Average waiting time of patients and OPD consultation TAT of critical departments/doctors through simple random sampling of a cross section of OPD patients on different days.
- The OPD of the **W Pratiksha Hospital** was selected as a study site**.105 samples** were randomly drawn from the cross section of visiting OPD patients for availing services of various specialties at the hospital over the month of **Feb and Mar. (i.e. 22nd Feb to 30th Mar 2020) two days a week.**
- The selected sample flow was closely observed right from time spent in queue, time for form filling, time for registration/billing followed by nursing assessment, waiting time to see the doctor and finally time spent with the doctor as the consultation time.
- The analysis of primary OPD data (for a period ranging from Feb to Mar 2020) was carried out on MS-Excel 2016 to be able to extract some meaningful observations, Waiting time was expressed in four blocks of minutes.

4.8 Sample size & Sampling technique

A Time Motion Study through an active observation was carried out. 105 samples were drawn conveniently. Convenient Sampling was carried out. The first patient visiting the registration counter will be taken as starting point and thereafter next patient was randomly selected who comes for the registration to the OPD after an interval of 2 to 3 patients /3-4 minutes.

4.9 Collection tool

The data collection tool/method used in this study is the time and motion that observe times using a stopwatch for each point of service delivery. This tool was used to track patient flow from the time they enter various OPDs, through various sections until the time they depart from the doctors' cabin.

4.10 Limitations of the Study

- Lockdown due to the CoVid-19 situation affected data collection.
- Few patients after being registered don't turn up on the same day or if doctor is not available for long they turn up the next day for consultation thus inflating the OPD TAT.
- The results of the study cannot be generalized to other hospital systems.

Chapter 5- Results and Analysis

This chapter contains results on patient waiting time and reasons that are affiliated with the overall time patients spend in the OPD of the hospital where this study has been carried out. This study involves 105 samples at random following the simple random technique from the cross section of patients visiting the various doctors on different days.

5.1 Statistical Analysis

The data was analyzed on the following-

- Overall mean TAT of OPD
- Distribution based on arrival of the patients
- Patient distribution based on Overall TAT of OPD
- Doctor wise Average waiting time of patients in OPD
- Doctor wise Average consultation time in OPD
- Topmost reasons/factors responsible for the long waiting times in OPD
- Cause-Effect Analysis

Overall Mean TAT of OPD-

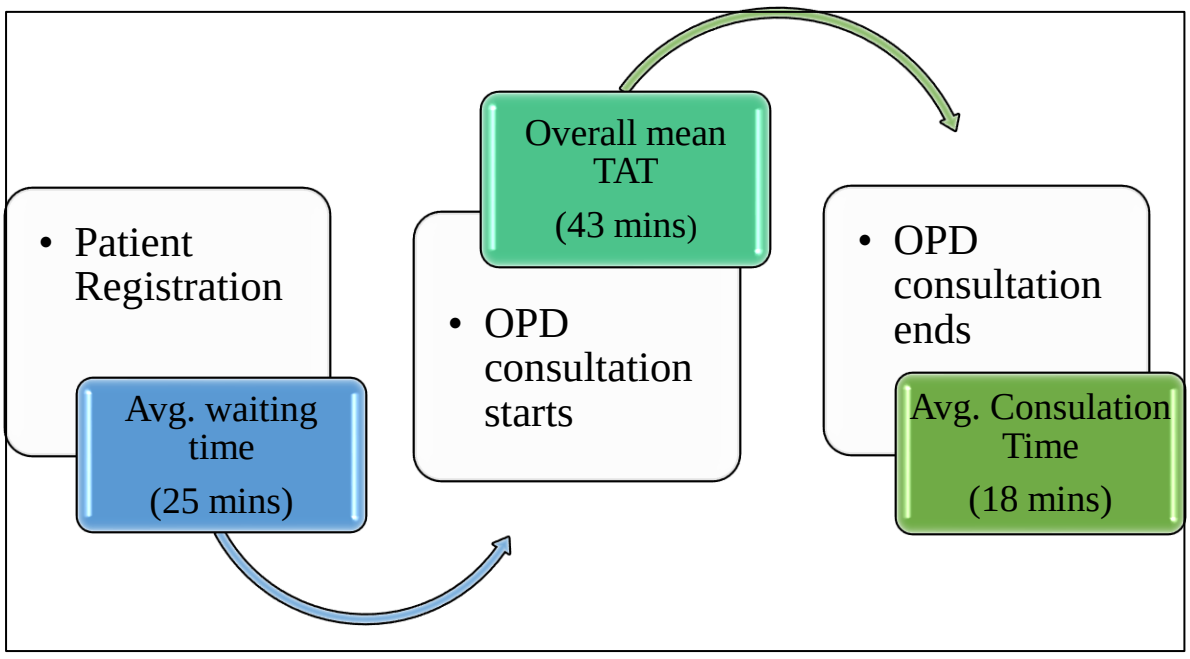


Figure 10 Figure showing Overall mean TAT

Distribution of patients based on overall mean TAT

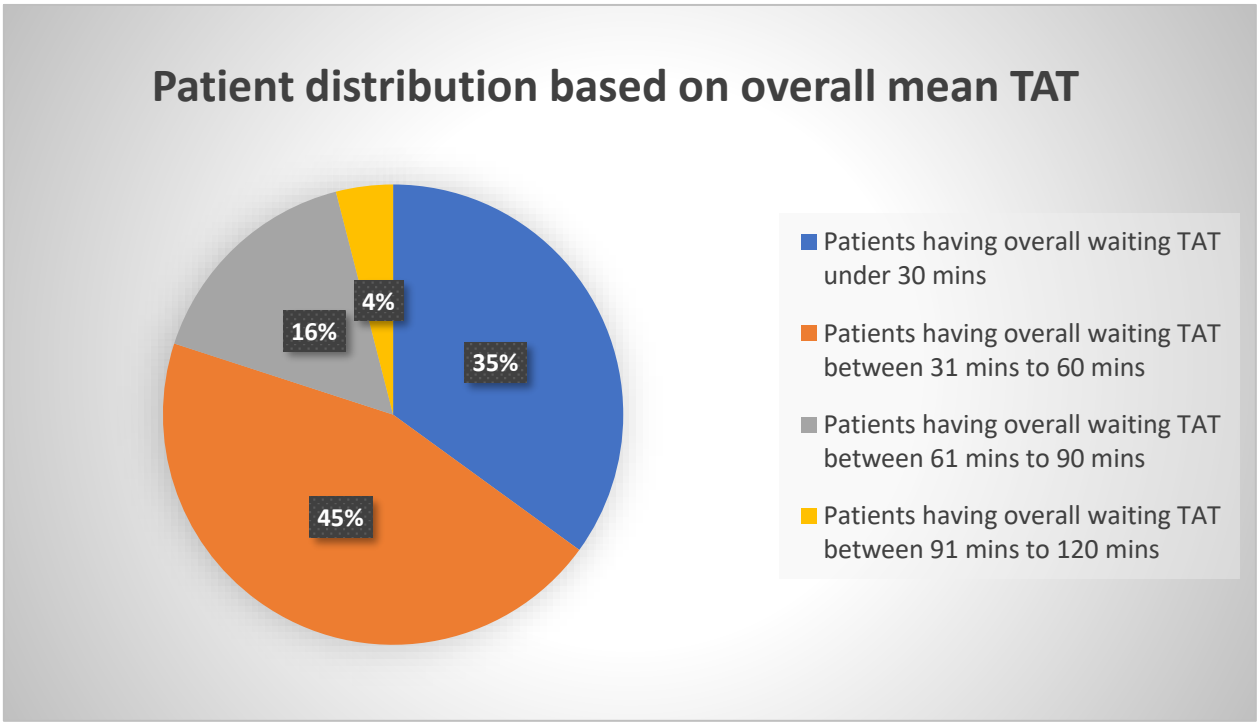


Figure 11 Graphical representation of patient distribution based on overall mean TAT

Interpretation-

The study found that the overall mean TAT for hospital is **43 mins**. Waiting time is expressed in four times blocks of minutes. As evident from the graph about **35%** patients in OPD have an overall waiting TAT of **under 30 mins**, while **45%** OPD patients have a TAT between **31 to 60 mins, 16%** patients have a TAT between **61 to 90 mins**, while only **4%** have a TAT between **91 to 120 mins**. (i.e. the max limit taken as a benchmark)

Distribution based on arrival of the patients

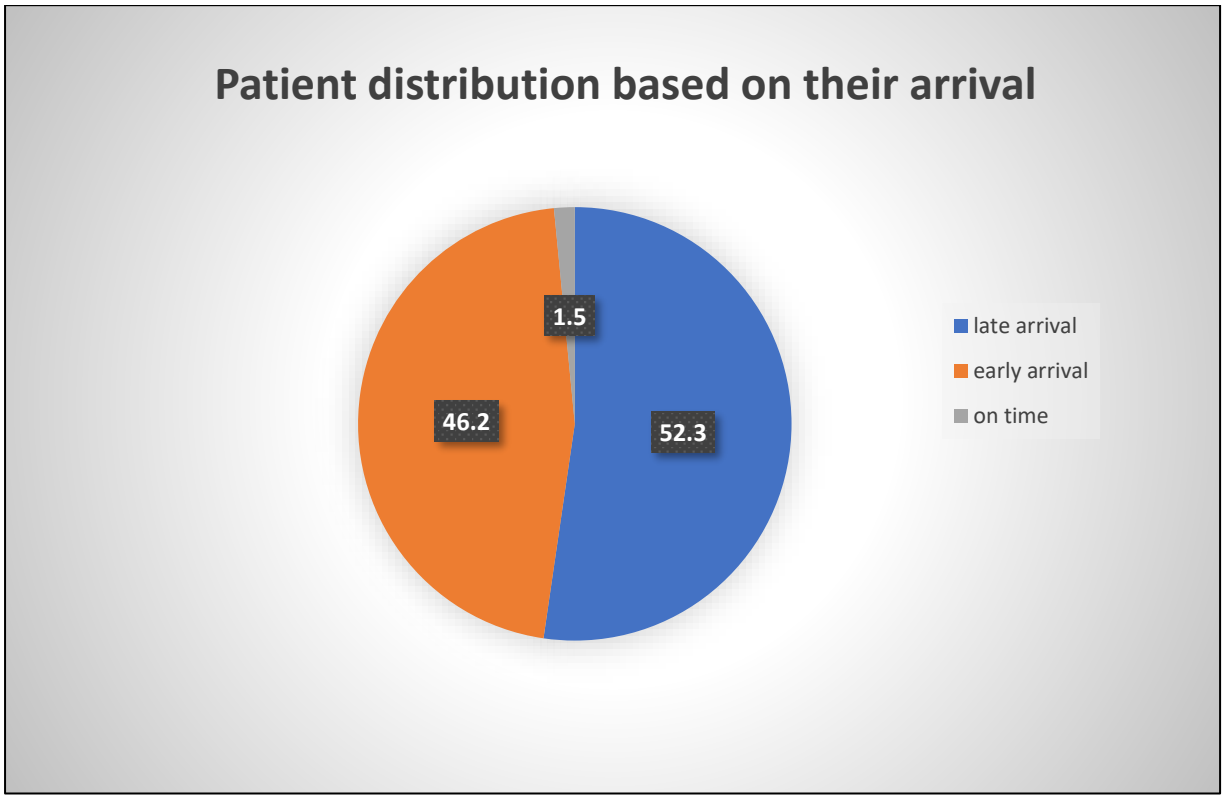


Figure 12 Graphical representation of distribution of patients based on their arrival

Interpretation-

This graph shows the distribution of patient based on their arrival i.e., Late arrival, Early arrival, and On-time arrival. There were around 53% of patients who arrived after their appointed time, while there were around 47% patients who arrived before their appointed times, which greatly contributing for the long waiting times for other patients/walk-in patients and there are only 2% patients who were on time for their appointments with doctors.

Doctor wise Average waiting time of patients in OPD

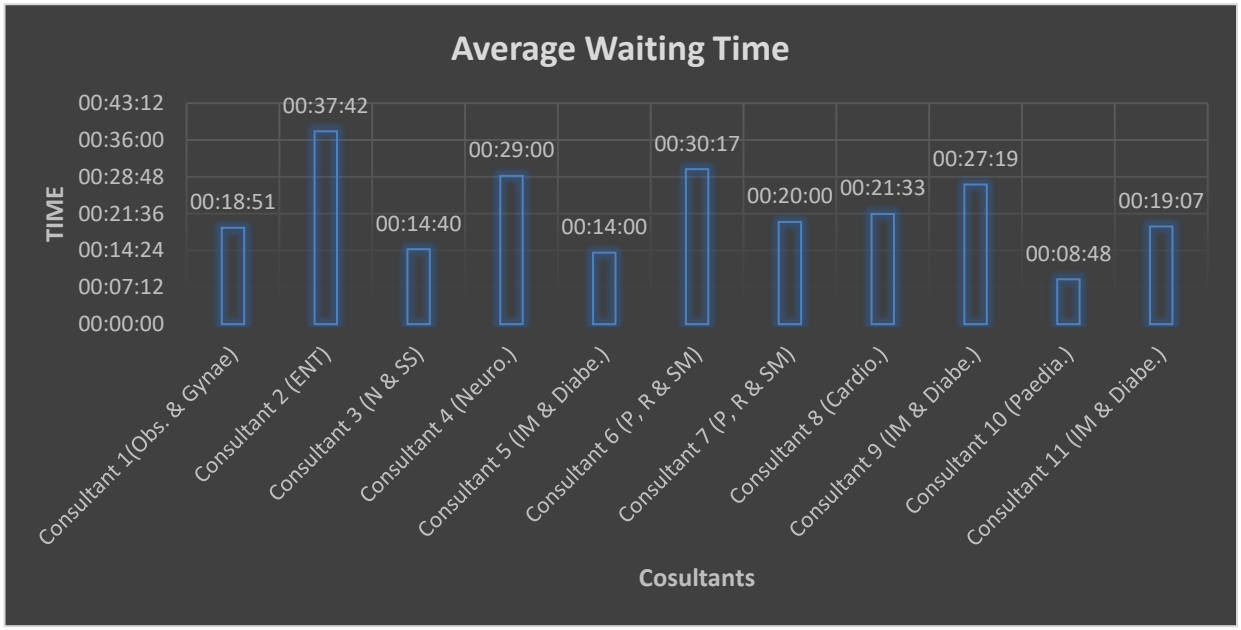


Figure 13 Graphical representation of Doctor wise average waiting time of patients in OPD

Interpretation-

This graph shows the Average waiting time of a patient for each doctor in the OPD. Consultant 1 (ENT Deptt.) has the highest avg. waiting time of about 38 mins, Consultant 4 (Neurology) has the avg. waiting time of 29 mins, Consultant 6 (Pulmonary, Resp. medicine & Sleep) has the avg waiting time of about 30 mins, and Consultant 9 (IM & Diabe.) Mann have a TAT of about 28 mins, due to the early/late arrival of the patients from their appointed times, overtime consultation with patients, communication gaps between doctor and nurses as many of the times nurses didn't know the whereabouts of the doctors.

Doctor wise Average consultation time in OPD

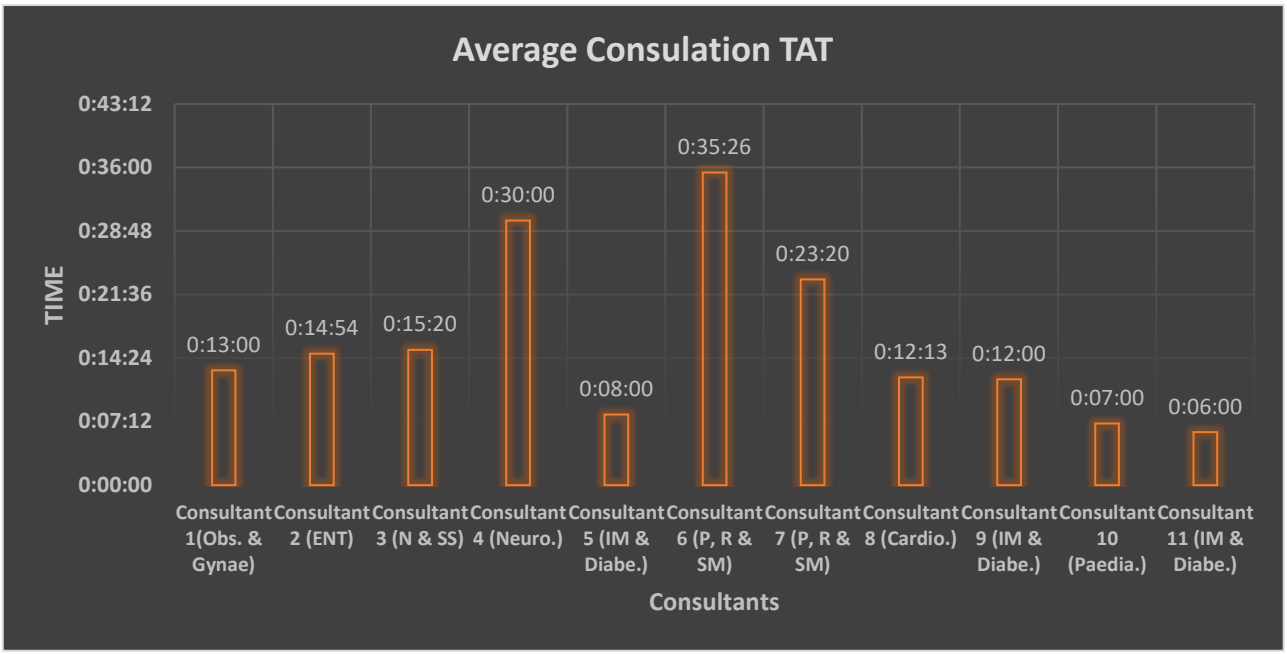


Figure 14 Graphical representation of Doctor wise average consultation time

Interpretation-

This graph shows the average consultation time taken by each doctor. The maximum consultation time has been taken by Consultant 6 (Pulmonary, Respiratory & Sleep medicine) and then by Consultant 7 from the same department. Consultant 4 from the neurology department has another highest avg consultation time of about 30 mins. That happens because of the short slot time for each patient & overtime consultation.

Factors/Reasons contributing in long waiting time in OPD

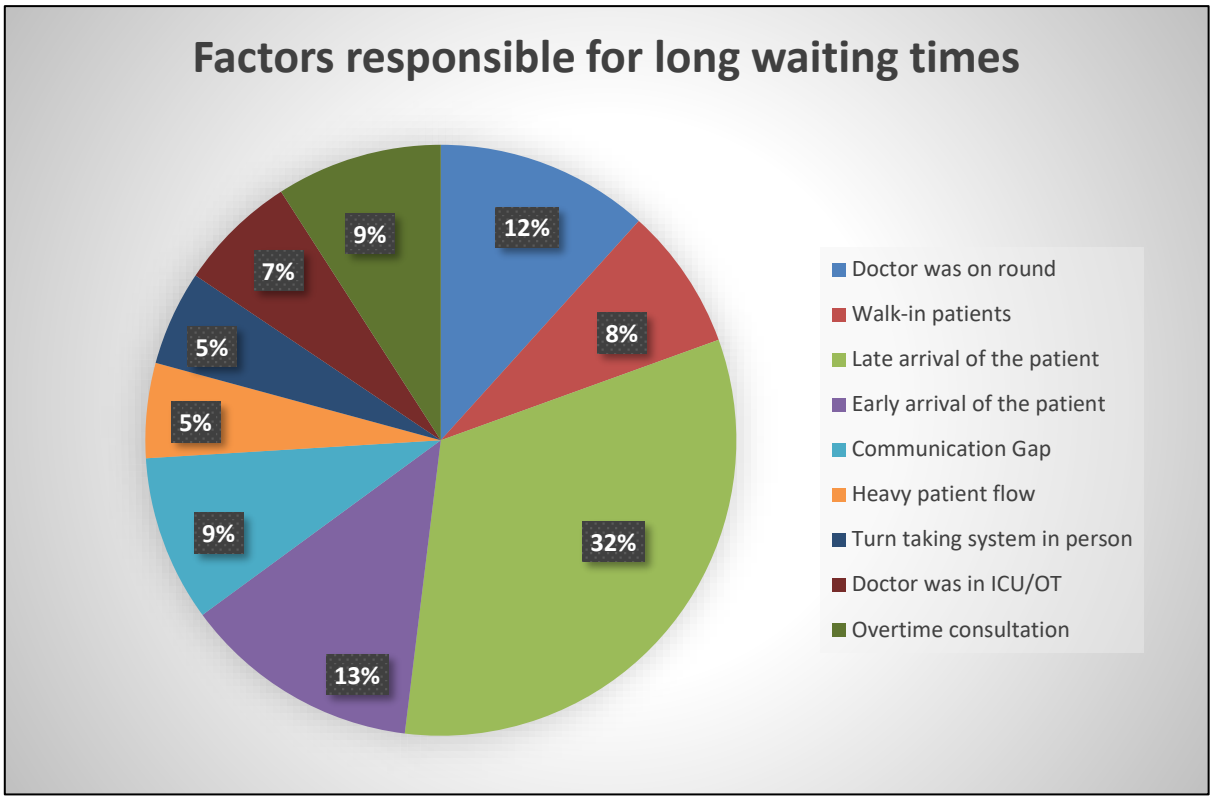


Figure 15 Graphical representation of factors contributing in long waiting times

Interpretation-

The pie graph outlines top most factors responsible for long waiting times. Late arrival of patient is the main reason compelling other patients to wait longer as there is no token system in place which can manage the walk in patients as well as patients with prior appointment. Communication gap is also a huge challenge to be catered. Miscommunication prevails amongst front line workers and the health care professionals as many a times there were instances when doctors were usually on round at the time of their appointment with patient

5.2 Cause Effect Analysis (Fish-bone Diagram) for Long waiting time in OPD

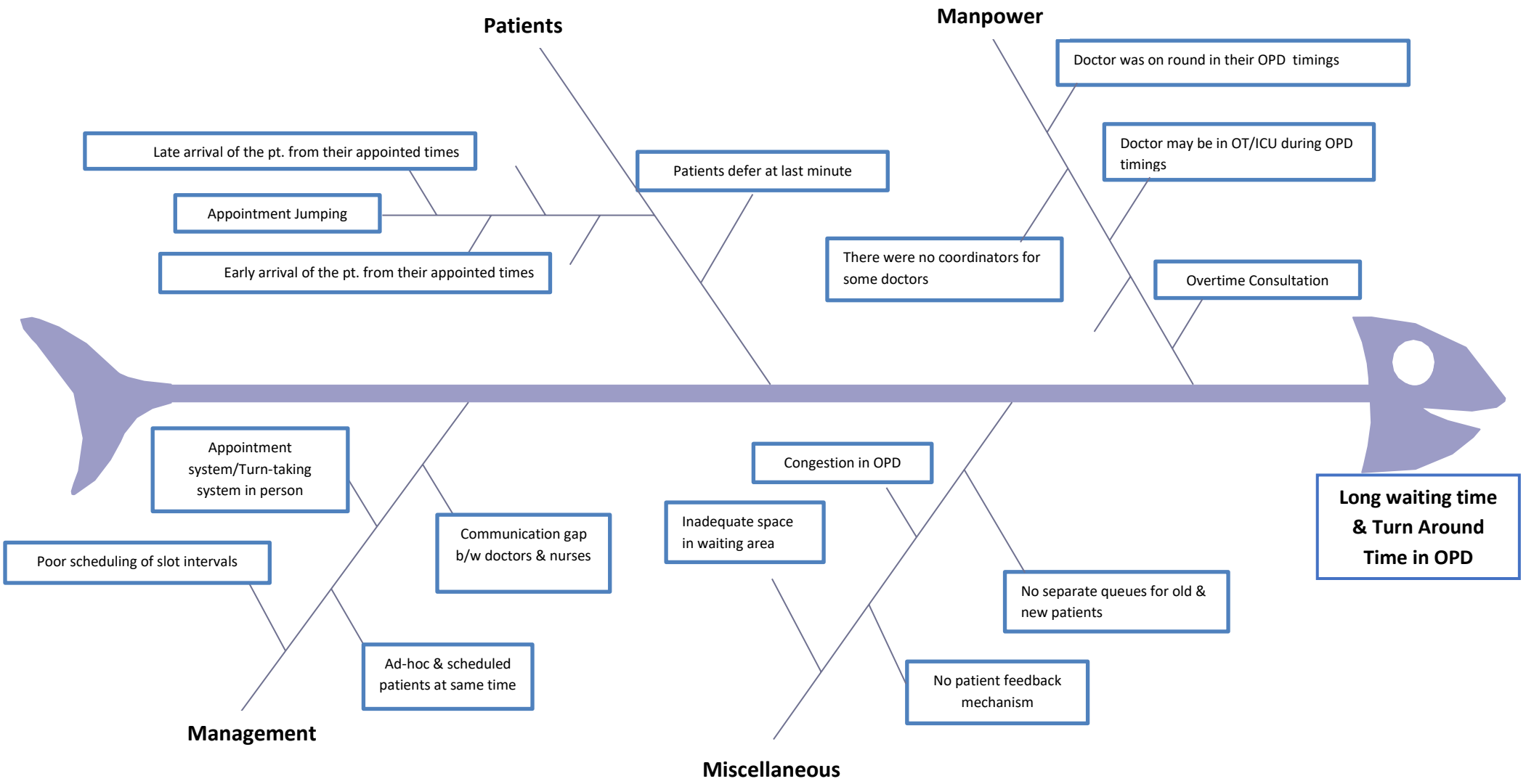


Figure 16 Cause-Effect Diagram of Long waiting times in OPD

Chapter 6- Conclusion & Recommendation

6.1 Recommendations/Suggestion for enhancing QoS at the hospital OPD

- Doctors should be strictly advised to adhere to the allotted slots.
- Doctor's rounds should be taken prior or after the OPD hours.
- There must be co-ordination between OPD hours and OT timings (in case of elective surgeries).
- Token system should be there to prevent overcrowding.
- Appointment display screens should be attached in the center if the waiting area for patient to monitor their turn for consultation.
- Additional support staff & counters for crowd management on specific days.
- E-form filling/registrations online or through tabs while in queue.
- Sperate queue/counters for old and new patients.
- Average waiting time for each OPD/doctor to be displayed.
- Appointment system to be reviewed and streamlined.
- Slot time should be increased for few OPD doctors to prevent long consultation time.
- Autogenerated reminders for arriving 10-15 mins prior their appointed time.
- Communication/Info gap with respect to patient queue management & doctor's absence be removed by staff, by keeping the waiting patient fully informed & aware of the latest development
- Dedicated counters/desk for handling basic queries.
- Deployment of more nurses/coordinators in peak hours of the OPD.
- Adequate waiting area with entertainment and health education measures through Television /Newspaper in OPD.
- Installation of Suggestion box/ Regular patient feedback mechanism should be there.

6.2 Conclusion

An Observational study was carried out in a multispecialty Hospital in Gurugram between 22nd Feb 2020 to 30th Mar 2020 to determine and analyze the average time spent by the patients in the OPD and be able to identify the root factors leading to high waiting times and finally to suggest few relevant recommendations based on above trend analysis on the MS-Excel platform, with a view to achieve further reduction in average OPD consultation TAT.

Waiting time is one of the most important problems in every healthcare system. In outpatient services there are certain factors which caused delays in providing the services on time. These delays cause reduction in patient satisfaction. Significant reduction in waiting time can be achieved in the outpatient service by using quality process approach .In addition the service was improved by effective communication providing enough manpower and educating the patients the importance of taking appointment before arriving at the hospital.

The study established that majority of its patients spend most of their time waiting for the doctor to receive services (mostly owing to late/early arrival of the patients from their appointed times, communication gap between frontline workers and the doctors as regards to doctors' non availability and for what time & reasons). It was also observed that higher delays are also due to the huge number of patients arriving in the OPD on specific days.

Subsequently, quality of service can be improved in the Outpatient Department by leadership, proper planning, training & education, effective management of resources, collaboration and co-operation among the service providers.

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