

**Summer Training at
Fortis Escorts Hospital Jaipur
(April 3 to June 2, 2017)**

Reducing Patient Waiting Time and Patient Satisfaction

**By
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**Under the guidance of
Dr. Suresh Joshi**

**MBA Hospital & Health Management
2016-2018**


**Institute of Health Management Research
The IIHMR University, Jaipur
2017**

CERTIFICATE

This is to certify that **Ms. Ankita Jain** has undergone summer training in **Fortis Escorts Hospital Jaipur**, from 3rd April to 2nd June 2017.

The candidate herself completed the project assign to her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health Management.

I wish her success in all her future endeavors.



Col. (Dr.) Ashok Kaushik

Dean (Academic & Student Affair)

The IIHMR University, Jaipur



Dr. Suresh Joshi

Adjunct Professor

The IIHMR University, Jaipur

Ref./FEHJ/HR-Comm./TRN/009

3rd June , 2017**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Ankita Jain** worked as a **Trainee** with us in the **Dept. of Administration** from 3rd April '2017 to 2nd June '2017 .

Her performance during the period in the department was good. She comes across as a willing, sincere and intelligent person who has a strong drive and zeal for learning.

We wish her the best for all her future endeavors.

Authorized Signatory

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ACKNOWLEDGEMENT

Words put on paper are mere ink marks, but when they have a purpose there exist a thought behind them. I too have a purpose to express my gratitude towards those individuals without whose guidance the project would not have been possible.

I would like to express my thanks to Lt Col Manan Mukul (Head Administration), Fortis Escorts Hospitals, Jaipur who has kindly permitted me to undertake the project in the organization.

I am also thankful to the other members of the organization for their support and providing the required information.

It was a pleasure to be associated with Fortis Escorts Hospitals, Jaipur. The experience that I have garnered has had a profound impact on my career choices and has helped me realize what is requisite for success in this industry. I carry high regards for the complete team of Fortis Hospitals Ltd.

I also take this opportunity to express a great sense of gratitude towards our Dean Dr. Ashok Kaushik and my mentor Dr. Suresh Joshi for providing me vital inputs to co-relate the present project work and hence provide a sound base to the report structure. A special word of thanks also goes to all the teaching and non-teaching staff of my institute and my friends.

Ankita Jain

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ANNEXURE: -

(A) TIME SCHEDULE: -

S. No	Name of the Department	Date(s) of Visit	% of Time Spent	Interacted with
1	PHARMACY	4/04/17	8 HOURS	Mr. SANJAY SHRIVASTAV
2	PURCAHSE DEPARTMENT	5/04/17	8 HOURS	Mr. YOGESH MATHUR
3	HOUSEKEEPING	6/04/17	8 HOURS	Mr. ABHISHEK
4	FOOD & BEVERAGES	7/04/17	8 HOURS	Mr. NAVRANG
5	ENGINEERING DEPARTMENT	8/04/17	8 HOURS	Mr. B K SHARMA

HOSPITAL PROFILE

Fortis Healthcare is India's fastest growing healthcare chain, with state-of-the-art facilities and an unparalleled commitment to patient care. Fortis Escorts Hospital, Jaipur is founded on the vision of becoming an integrated Healthcare Delivery Organization driven by quality, excellence, technology and compassionate care. FEH, one of the largest private healthcare companies in India, has one of its hospitals in Jaipur as Fortis Escorts Hospital, Jaipur. which specializes in cardiac sciences, neurosciences, renal sciences and gastrointestinal diseases. The hospital also provides superior services in mother and childcare (Lafemme), orthopedics and also a complete range of multi-specialty services in all disciplines.

FEHJ has dedicated facilities for comprehensive care of trauma patients and others in need of emergency care which include an emergency operation theatre and a 10-bedded medical intensive care unit (MICU). FEHJ is the first amongst the proposed multi super specialty hospitals to be set up in Rajasthan. FEHJ is the first hospital in the country to attain NABH Accreditation in minimum stipulated time (Six months) after commencement of operations and was re-accredited on 27th April 2011. FHL is a super-specialty hospital backed by multispecialty.

Super Specialities- Cardiology & Cardiac Surgery, Renal Sciences, Neuro Sciences, Gastro-Intestinal sciences.

Multi Specialities - Orthopedics & Joint Replacement, Diabetes & Endocrinology, Dermatology, Internal Medicine, Pulmonary, Medicine, Ophthalmology, Dietetics, Physiotherapy and Preventive Health Check, General Surgery, Dental Surgery, Cosmetic & Plastic Surgery, ENT, Gynaecology & Obstetrics, Paediatrics & Neonatology.

VISION OF THE HOSPITAL:

"To create a world-class integrated healthcare delivery & learning system in India, entailing the finest medical skills combined with compassionate patient care".

HISTORY:

Jaipur, Aug 2, 2007 - Fortis Escorts Hospitals, Jaipur one of the largest private healthcare companies in India, Thursday announced a multi-specialty hospital at Jaipur as part of its initiative to expand its operations in Rajasthan . The then Chief Minister, Mrs. Vasundhara Raje inaugurated the Fortis Escorts Hospital Jaipur in the presence of Mr. Malvinder Mohan Singh, Chairman, Fortis Healthcare, Mr. Shivinder Mohan Singh, CEO and MD, Fortis Hospitals, besides other dignitaries and company officials.

LOCATION:

The access to the hospital is very easy. The hospital is located on JLN Marg road, Jaipur. The address of the hospital is:

Fortis Escorts Hospital, Jaipur

Jawahar Lal Nehru Marg,

Malviya Nagar,

Jaipur- 302107

Rajasthan, India

Tel: 91-141-2547000

AREA:

Spread over 6.68 acres with an investment of Rs. 1.10 billion, it has an operational bed facility of 250 beds with an installed bed capacity of 300 beds.

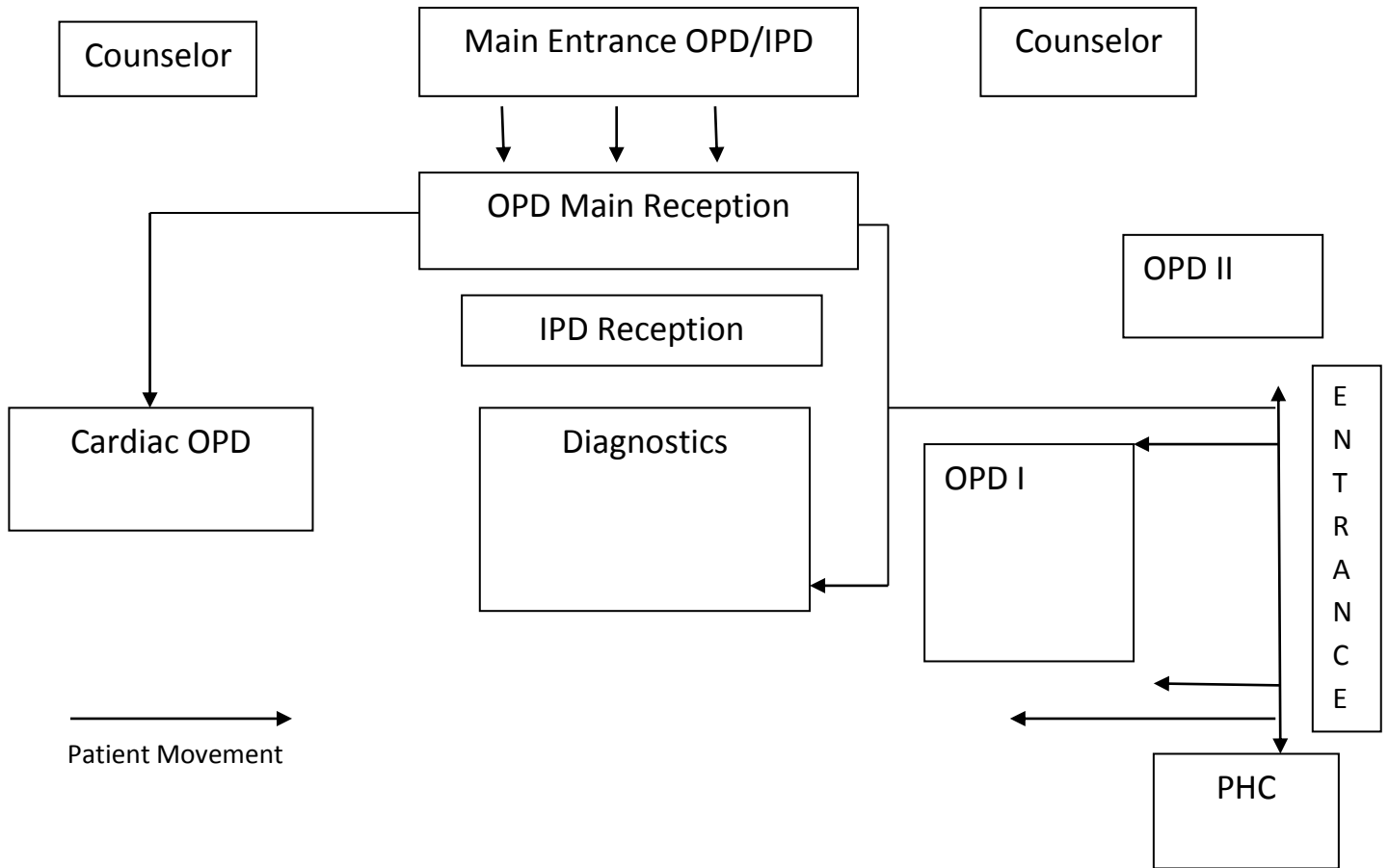
NUMBER OF DEPARTMENTS:

There are presently 34 functional departments in the hospital comprising of Clinical and Non-clinical departments. The detailed information about each department visited is given below.

OPD WORKING:

Outpatient services in hospitals have evolved in line with patient needs demands and expectations from a limited service offering basic & minor clinical services to highly evolved & organized services. It is the first point of contact between patient's, their relatives & hospital & its staff. It is referred to as "shops window of the hospital".

Layout of OPD Patient flow:



Roles & Functions:

- To provide community a major source of specialist diagnostic medical opinion
- To treat on ambulatory & domiciliary basis all cases which can be treated.
- To refer patients for admissions to the hospital
- To carry out after care & medical rehabilitation after discharge

IPD WORKING:

Inpatient services are Hospital services and items furnished to an inpatient of a hospital by the hospital, including bed and board, nursing and related services, diagnostic and therapeutic services, and medical or surgical services. Indoor services are also known as “Nursing Services “ and provided to such patients who have been admitted in the hospital , either for observation , investigation or treatment.

To furnish most desirable environment substituting as temporary home for the patient

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graph TD; ME[Main Entrance OPD/IPD] --> E[Emergency]; ME --> T[Triage]; ME --> IPD[IPD reception]; ME --> OPD[OPD main Entrance]; ME --> C1[Counselor]; ME --> C2[Counselor]; IPD --> VLV[Visitors Lobby]; VLV --> T; E --> T; T --> T; style E fill:#f9f9f9; style IPD fill:#f9f9f9; style VLV fill:#f9f9f9; style T fill:#f9f9f9;
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The flowchart illustrates the patient movement process. It begins with the 'Main Entrance OPD/IPD' box, which has arrows pointing to 'Emergency', 'Triage', 'IPD reception', 'OPD main Entrance', and two 'Counselor' boxes. The 'IPD reception' box (shaded) has an arrow pointing to the 'Visitors Lobby' box (shaded). The 'Visitors Lobby' box contains a 'Lift' box and text indicating it is the way to the 1st, 2nd, and 3rd floors. An arrow points from the 'Visitors Lobby' box to the 'Triage' box (shaded). The 'Emergency' box (shaded) also has an arrow pointing to the 'Triage' box. The 'Triage' box has a self-looping arrow. A legend at the bottom shows a right-pointing arrow labeled 'Patient movement'.

DEPARTMENT INFORMATION

The organization comprises of the clinical and non-clinical departments. Each department has its own operations.

1. QUALITY ASSURANCE DEPARTMENT

Goal: Headed to maintain and perk up the standards.

Quality assurance, or QA for short, is the activity of providing evidence needed to establish quality in work, and that activities that require good quality are being performed effectively. All those planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given requirements for quality as per FOS (Fortis Operating System).

Documents maintained:

- Standard Operating Procedure (SOP"s)
- Policies
- Manuals
- Plans
- Committees
- Quality Indicators
- Internal Audit
- Medical Audit
- Training Record
- QA Programmes
- Clinical Guidelines

2. HUMAN RESOURCE DEPARTMENT

Goal: To ensure availability & retention of quality talent to meet organization goals and objectives. Overall growth & development of employee's orientation & functional training.

Scope of Services:

- Manpower Planning
- Recruitment Process
- Internal job posting process

- Pre-Employment Health Check-up
- Trainings
- Attendance & leave management
- Appraisal & Promotion Process
- Statutory compliances
- Medical Benefits
- Employee Welfare Programs
- Disciplinary Action
- Grievance Handling
- Medical by laws
- Payroll Management
- Budgeting

3. PHARMACY

Goal: The Goal of the Pharmacy is to provide the Medicines to the patient.

Functions of the Department

- Receipt of Material (centralized receipt at Receiving Bay)
- Issue of Material to patients and various Departments (Centralized dispensing from Main Stores)
- Physical Stock Verification

Departmental Structure

IPD Pharmacy → 1 In charge, 3 Pharmacist, 1 Accountant, 1 GDA, 1 Housekeeping.

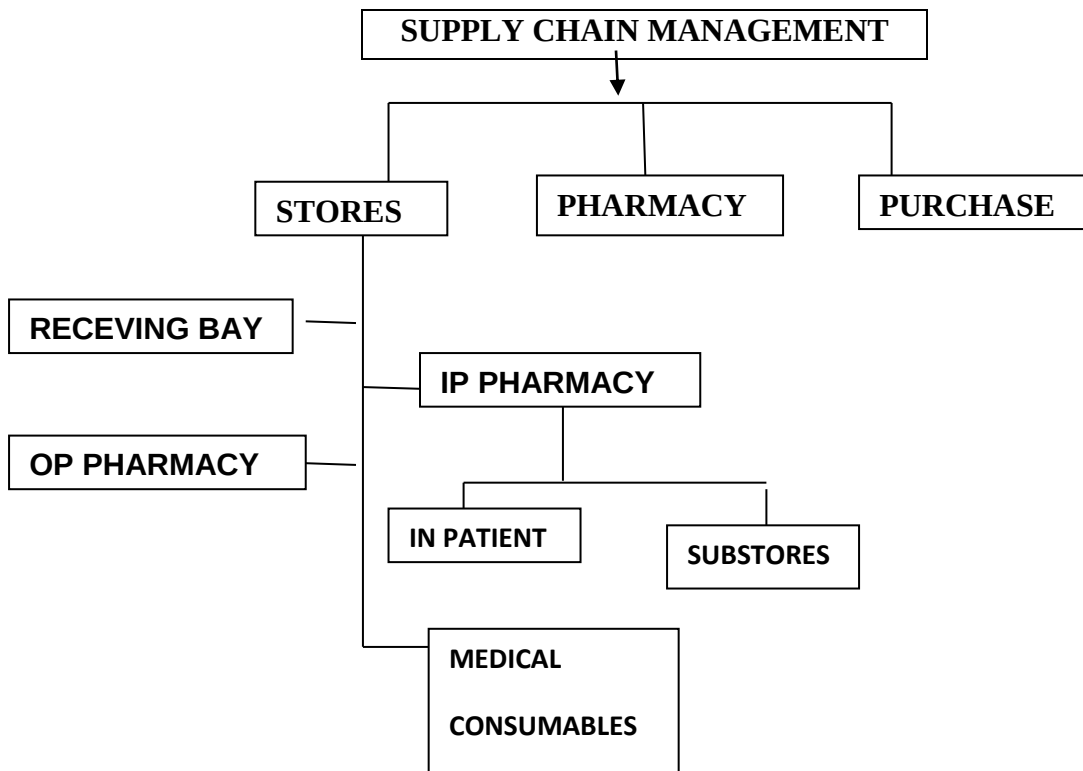
Scope of Services:

The scope and complexity of services provided by this department is to give services of all range of medicine and surgical Items to the patient and the ward and OTs. The types & areas served are all the Department of the Hospitals like General ward, ICUs, OTs and Bio-Medical.

Services include:

- Procuring and providing the genuine medicine to the patient.
- Deliver the medicine to the Wards and OTs.
- Discharge Summery of patient (medicine issued)

Process Flows:



4. HOUSE KEEPING

Goal: To achieve defect free room with 100% hygiene and cleanliness. To maximize patient's satisfaction with minimum cost.

Departmental structure:

Head of Department, Supervisors, Contractual Supervisors, GDA and Cleaning Staff.

Scope of Services:

The scope and complexity of services provided by this department is:

- Cleaning of all areas.
- Providing water
- Providing room amenities
- Providing services like glass cleaning, pest controlling , horticulture and in house laundry
- Waste disposal

5. MARKETING:

Goal: Marketing department is responsible for the revenue generation through Brand building, Retail Sales, Corporate Marketing PR & Media Communications & liaison with Government. Some of key activities of the department are Brand Awareness, Events Management, Corporate Social Responsibility, and ensures Business & Growth in line with Organizational Objectives.

Functions of the Department

The department works together in cohesion as a team to achieve following Objectives

1. To achieve Financial Budgets for the Unit.
2. To outgrow competition in dynamic market by strong presence through Contact programs & Events.
3. To position Brand Fortis as Leading Healthcare Service Provider with Patient Centric approach to Medical Fraternity.
4. Design and implement growth tools and plan for Annual and Medium Term Strategy for Unit in line with Organization Objective
5. Planning of Events like CME's, Camps, Preventive Medicine Lecture, and Friends of Fortis for patient interface with Unit.
6. Plan and conduct events based on with Corporate Social Responsibility.

Documents maintained by the department:

- Tariff Maintenance
- Media Report

6. FINANCE

Goal: To provide accurate relevant and timely financial information necessary in making right business plan and decisions.

Scope of Services:

The scope & complexity of service provided by this department is:

- Business building insights.
- Areas for lowering cost & improve profitability.
- Updating of bills on daily basis for IPD patients.
- Customer (Patient's Attendant) satisfaction for billing concern.
- Profit and Loss.

7. INFORMATION TECHNOLOGY

Goal: Provide IT Value to end users with respect to their day to day function.

Scope of Services:

The scope and complexity of services provided by this department is Application Software (Medtrack & Prodigious)

- IT Infrastructure
- Hardware & Network
- Anti-Virus Services
- Internet Services
- Email Services

8. FOOD & BEVERAGE

Goal: To provide food and beverages and fulfill the needs and desires of our esteemed customers.

Functions:

1. Daily auditing of stores and kitchen area.
2. Take rounds of the entire service area with and after the service timings.
3. Shift wise briefing and de briefing of the contractual staff to ensure smooth and flawless functioning.
4. Monitoring of services and sales at various outlets like Coffee shops, Executive/Doctor's dining hall.
5. Regularly maintain the departmental reports.

9. ENGINEERING

Goal: To manage all engineering equipment and machines & supervising day to day hospital maintenance work and ensuring smooth functioning of all facilities of hospital.

Functions of the Department:

1. Responsible for managing plant engineering equipment, utilities, spares and consumables like Diesel generator, Plumbing, Pipeline, Ventilation, Air conditioning, Carpentry, Sewage treatment, Water treatment etc
2. Responsible for controlling consumption / provisions of power, water etc
3. Address and resolve escalated complaints and grievances from the user departments.
4. To ensure planned & timely progress and completion of commissioning activities and take proper handover from the project team regarding the engineering works.

10. PATIENT WELFARE DEPARTMENT

Goal: To make and position the hospital as a “Center of Excellence” by ensuring customer satisfaction through personalized customer care, following the guiding principles of empathy, care and compassion to make the patients feel cared for.

Functions of the Department:

1. To maintain a good relation with the patients / attendants in the hospital through personalized service.
2. Managing patients/ attendant’s expectations as well as keeping the interests of the organization alive.
3. To enhance the value of services being provided by making the patient and the attendant comfortable and acquainted to the hospital.
4. To improve the quality of service from the patients’ perspective through their feedback.
5. To look beyond the patients’ / attendants’ grievances, to identify loopholes in our existing system and the factual problems of the patients.
6. Networking within the organization for the benefit of the patient / attendant and to ensure the action on the feedback.

RESEARCH PROJECT

REDUCING PATIENT WAITING TIME AND PATIENT SATISFACTION

Introduction: -

Waiting time can be defined as an objective evaluation of the quality of service received against the individual's expectations. In this study, patient waiting time was expressed as an arithmetic sum of all section waiting time. Patients spend a considerable amount of time in hospitals waiting for services to be delivered by the health professionals. Delayed access to health care is assumed to negatively affect health outcomes due to delays in diagnosis and treatment.

Large waiting times at hospital outpatient clinics are a cause of dissatisfaction to patients, cause additional stress to hospital staff, increase the risk of contagion and add complications for patients with medical conditions. Reducing waiting times and surgeon idle time improves the quality of service and efficiency of a hospital.

Patient flow is the most critical factor within the outpatient clinical settings, as it directly affects the patients' health and their satisfaction level. Outpatient clinics and their staff members are involved in a variety of activities, where information management, accurate use of data, appropriate allocation of resources, and timely execution of processes are all necessary to maintain the patient flow within the clinic.

Patient flow represents the ability of the healthcare system to serve patients quickly and efficiently as they move through stages of care. Blockage in the flow can increase waiting and through put time creating un-necessary delay at the facility before the patient receives care, thus having an impact of health care outcomes.

Literature Review: -

In early studies physician time was considered more valuable than patient time. Thus, the main objective was to make the most efficient use of the physician's time, scheduling patients to reduce idle time, usually at the expense of an increase in patient's wait time. More recently, patient time has gained more importance, pushing for a more balanced solution.

Definition: -

Turn Around Time: - In this study it is the total time from the time patient is at the registration counter till he meets the consultant.

Waiting Time: - It is the time patient has to wait before availing a service. In my study the service is the consultation of the doctor.

Various studies have shown that there is negative relationship between long waiting time and patient satisfaction. In 2011, Umar et al, did a study on patient waiting time at the outpatient department in tertiary health institution, the Usmanu Danfodiyo University in Sokoto, Nigeria to assess patient satisfaction. Total 384 patients who participated in a questionnaire. It was showed that most of the patients waited for more than one hour to be seen by the doctor while only 118 (31%) stayed there for less than an hour and out of them only 83 (70%) were satisfied. However, majority of patients 173 (45%) were dissatisfied with the services in the OPD because of long waiting time.

Another study was done by MIT team (Massachusetts Institute of Technology in Cambridge, US) to investigate the reasons for long waiting time in OPD clinics at LV Prasad Eye Institute (LVPEI) in Hyderabad, India. This study was done to understand the patient waiting times. Patients suffered from obvious delays vary from 45 minutes to 6 hours. It made patients continually bored and anxious. All these played roles in patients' dissatisfaction and decreased clinical reputation of the clinic as found in patient's survey (Karnil & Lyan, 2013).

These articles showed the need to measure the total waiting time of patient in the OPD and to identify and optimize the delays so as to improve the overall experience of the patients and make their visit more satisfactory. This will result in good reputation of the hospital as is evident in many studies.

RATIONALE: -

OPD being the first point of contact with the patients, it acts as a window to all the healthcare services provided to the community. The care provided in this department is an indicator of the overall quality of the services of the hospital and is reflected by the satisfaction patient has with the time spent. This study may be able to generate time sensitive and clinic specific operational data that can be used by management to improve the patient flow and assess the quality of the services. It may also help in identifying point of delays and reason behind these delays that can help the management and the policy-makers to work on the areas that need improvement.

RESEARCH QUESTION: -

How long do patients wait to receive consultation and what are the reasons of prolonged waiting time in the outpatient department of Fortis Hospital, Jaipur?

OBJECTIVES: -

- To observe the patient flow process of the outpatient department.
- To identify the average waiting time spent by patient in the OPD before consultation.
- If it is high, to identify the problem areas leading to prolonged waiting time.
- To suggest solution to these problems.

MODE OF DATA COLLECTION: -

- Study Design And Method: -
- Type of study – Cross-sectional Descriptive Study.
- Study Area – OPD of Fortis Hospital, Jaipur.
- Duration of study – 2 months (3rd April to 2nd June 2017)
- Sampling Design –

Sampling Method- Non-Probability Sampling.

Sampling Type – Convenient Sampling.

Sample Size – 60 OPD patients.

- Data Collection Method-

Data was collected using both Primary and Secondary Sources. The primary data was collected through personal observation and discussion with the staff and the secondary source was SOP system of the hospital.

- Data Collection Tools: -

There are two methods that were used as tools for the study. The first was the time and motion that measured time in the patient flow process and the second tool was the staff informants which provided the opinion on the reasons for the delays.

A total of 60 patients were observed during the training.

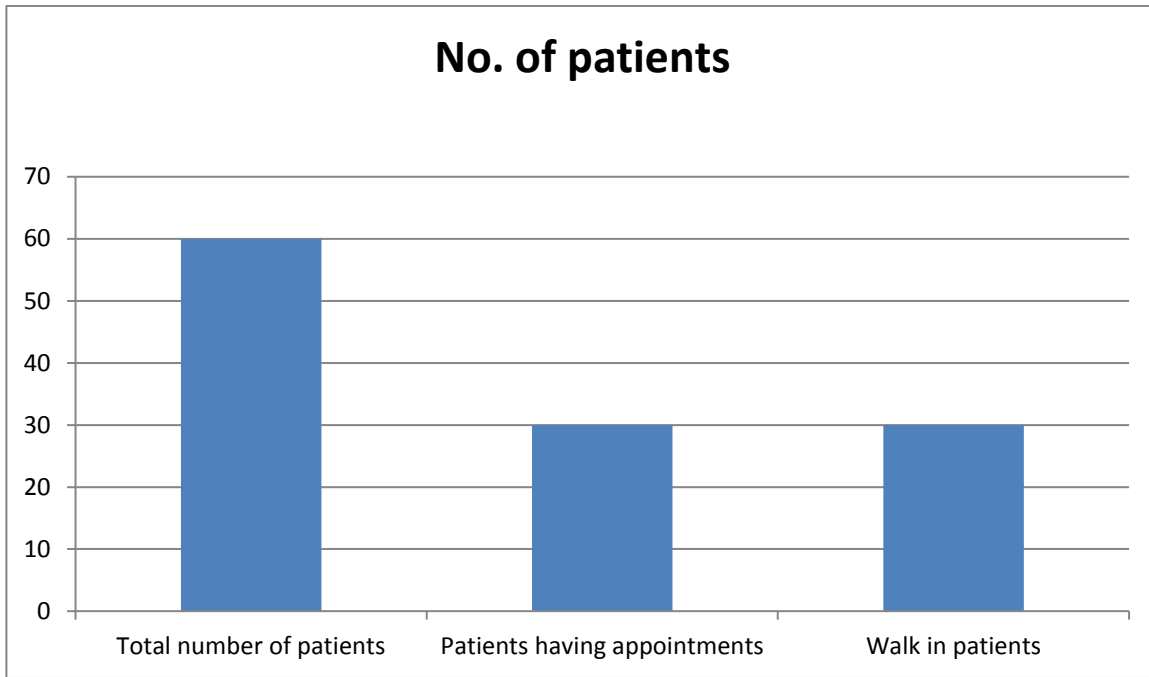


Figure 1: - Total no. of appointment and walk in patients observed.

The hospital has an appointment system for the patients to visit the doctors. However, some patients come as walk-ins who are also attended by the doctors. So in this study out of 60 patients observed, 30 are those who visited the OPD after taking appointments and rest 30 came as walk-in.

OPD 1	OPD 2	Cardiac OPD
20	15	25

Table 1: - OPD wise number of patients observed that constitute the sample.

Data Analysis and Interpretation tools: -

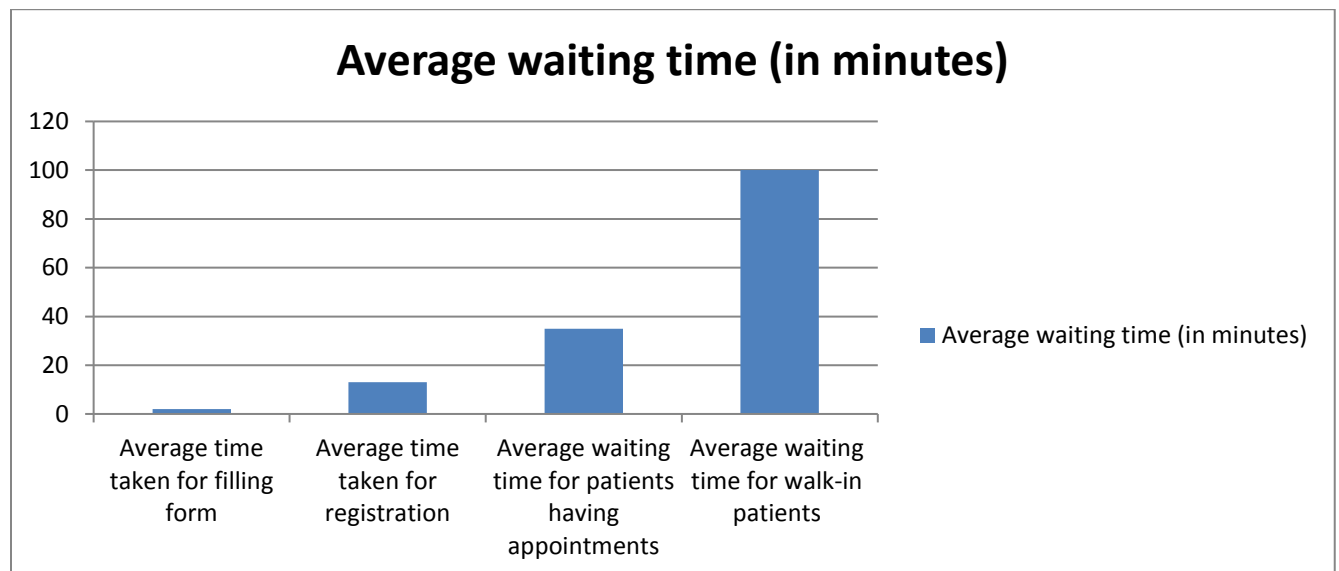
Classification and tabulation transforms the raw data into useful information by organizing the data collected through time motion study.

Mean and standard deviation is calculated for analysis of the data.

Graphical presentation is done through bar graphs and pie charts.

MS-Excel is used for all the analysis done MS-Word is used to prepare the report.

Time taken for waiting in the queue	20 minutes
Time taken for filling registration form	2 minutes
Time taken at the the counter	5 minutes
Time taken to go to the pod	2 minutes
Average time taken for consultation for patients having appointments	35 minutes
Average time taken for consultation for walk in patients	100 minutes



On an average patient had to wait for 93 minutes before going for consultation. The recommended time of the hospital is 15 minutes after the patient comes to the pod. It means that patients spent a lot of extra time in the OPD to see the doctor. This suggests there is a delay in the overall process.

OBSERVATION BASED REASON FOR PROLONGED WAITING TIME:-

Patient Related-

- Human variation in filling up the registration form due to different demographic profile.
- Illegible handwriting of the patient.
- Over-loading of the patient on some days.

Staff Related-

- Time spent on confirming about the test written on the prescription when it is not understood.
- Less number of manpower.
- Sometimes all the staff go together for a break.

Equipment Related-

- Computer shut-down.
- Non-working of printer.
- Less number of card swipe machine.

System Related-

- Delay in billing due to shutting down of Track Care.
- Some kind of refund.

Doctor Related-

- Doctor late for duty.
- Doctor went on rounds during OPD hours.
- Extended consultation time for some patients.

RECOMMENDATIONS:-

- Observations showed that new patients have no information regarding registration forms. Therefore there should be information written somewhere in the reception regarding the registration forms so that it will reduce their waiting time. Prominent May I Help You Desk.
- More number of printers in the main lobby will stop the misplacing of the receipts.
- There can be a list of tests which can be ticked by doctors during consultation while prescribing tests. This will lessen the confusion regarding tests written on the prescription.
- Separate counter for those patients who have already taken appointment and are registered patients.
- Long waiting queues were seen, this can be optimized by installment of KIOSK for appointed patients so that they can activate the visit on their own. Diverting some of the appointed patients will reduce the work load at the reception.
- Separate counter for visit activation and payment for diagnostic services both radiology and laboratory can greatly reduce the work load and the long queues at the nurse station.
- Rescheduling of appointment slot as well as the OPD timings after a discussion with the consultant may cater the delay due to extended consultation time and the unavailability of the doctor.
- A separate slot for rounds to check on inpatients is needed to avoid unavailability of doctors in the OPD during their consultation hours. At the same time doctors should be encouraged to be punctual.
- Ensuring proper communication about whereabouts of consultants during OPD hours and communicating the arrival of patients to the doctor in case s/he is in Operation theatre, emergency by vigilance and supervision.

- Any delay due to equipment failure such as computer shut down, non-working of printer, faulty readings on weight machine etc. can be avoided by checking of the proper working of the equipments on regular intervals.
- Sign boards should be more bold to guide the patients to the concerned area.

REFERENCES: -

1. Kamil, A. & Lyan , D. (2013, 4th October). Understanding patient waiting times at the LV Prada Eye Institute. System Design and Management Program, Massachusetts Institute of Technology, Cambridge, USA e-publication and news.
2. Umar, I, Oche, M.O. & Umar, A.S. (2011). Patient waiting time in a tertiary health institution in North Nigeria. Journal of Public Health and Epidemiology, 3(2), 78-82.
3. Virmani, V., Bansal, A.K., Pandit, D.P. & Howale D.S. (2014, February). Waiting time analysis of Outpatient Department at Gmers Medical College Hospital Valsad. International Journal of Specific Research, 3(2), 280-282.
4. www.iihmr.org.in
5. www.google.com