

## WAITING TIME AUDIT IN HOSPITAL AT VARIOUS DEPARTMENT

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### Abstract

**Background:** The multispecialty hospitals in India's are increasing their quality of service day by day to the patients in order to sustain and satisfy them. The waiting time in hospitals play a vital role in providing quality service in providing medical treatment or diagnosis. Hence this has become a major challenging factor in satisfying the patients. To decreasing the waiting time various procedures and methods are followed. This study is undertaken to study the overall waiting taken by the patients in various hospital departments in OPD, sample collection, emergency. The aim is to measure the waiting time taken in various departments such as transportation, registration, diagnosis and billing in OPD then the recommendations was given to decrease the waiting time. the mean waiting time was calculated in OPD for various departments and it gives the result for overall patient satisfaction.

## INTRODUCTION

The study has been conducted at Mahatma Gandhi Medical College & Hospital, Jaipur on "Waiting time audit from Emergency, Sample Collection & OPD's"

### Out Patient's Department

The outpatient service is the basic and very important service provided by the hospital as it provides services to more number of patients at reasonable cost. The waiting time in various departments is an important function which has to be considered for the fulfillment of the patients. Usually it is observed that patients at the hospital OPD's have to wait for an excessively long time before they can get medical cure or advice by specialized healthcare personnel. Long waiting time in hospital causes dissatisfaction among patients. In a relatively managed healthcare environment, long waiting time of patients in an OPD badly affects the hospital ability to attract new amplified business. It is difficult to sell services if individuals are dissatisfied with the delayed process and increased waiting time. There are many indicators of quality assurance in hospitals. In outpatient departments one of the significant indicators of excellence assurance for patients is "wait time". Hence it is unfavorable for a hospital on the whole to have long OPD waiting time. It is generally accepted that when clinics are cancelled or reduced by the hospital, patients with clinical priorities retain priority access. A study of the clinic rules is necessary. This should be coupled with an examination by waiting time for

critical and soon to be seen patients. The evaluation of clinic rules should ensure they replicate the main concern mix of the referrals. The greater part of outpatient services use a traditional rigid appointment system, where patients are given appointments on receipt of an appointment letter. This system has many drawbacks. Patients are appointed well in advance so any changes to the clinic schedule or frequency of clinics will affect the appointments of all the patients waiting. Owing to their dedication to provide quality service to patients the health care institution aims to decrease the waiting time in the various OPD and increase patient satisfaction by following various techniques and procedures.

### Emergency

Hospital with specified responsibilities is known as important health care organization. An Emergency Department (ED) provides urgent clinical and Para-clinical care for patients that injured in accidents and incidents. The injured patients need urgent treatment according to their situation.

- The ED is one of the important wards in hospital. The main function of the ED is health care offering in high-risk emergency situation. The patients' rescue should be a high priority at the ED for acute patient situations. The ED provides urgent clinical and Para clinical care for patients that injured in accidents and incidents. The injured patients need urgent treatment according to their situations. These patients should receive resuscitative treatments in shortest time.

- In the ED seconds and minutes are very important for patients. These times may be determinant of the interval between death and serious disability or life.
- Patient waiting time in the ED is one of the important factors in health care management. It is one of the determinate factors on patient satisfaction, as well as indicators for evaluating quality of emergency services.

### Diagnostic

Sample collection facility is hospital important part of laboratory services. It's the only place where patient come to contact lab services. The patient is availing the services and impact till the end of hospital services. Patient waiting time at sample collection is important factor after OPD services. Patient expectation is to take services in one prick and proper sample collection, error free which lead to patient satisfaction.

### Objective

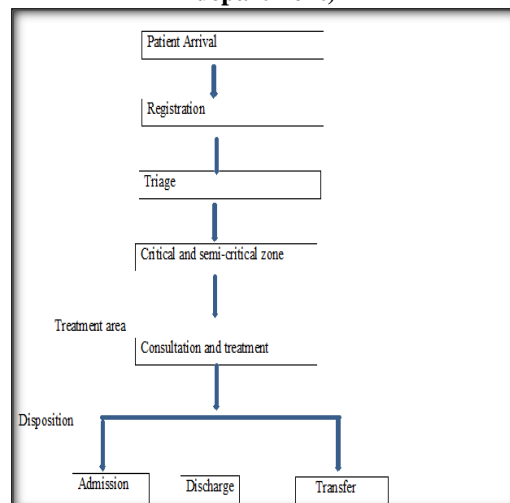
This project is based on OPD, Emergency, Sample Collection, Department to understand the causes for the delay in waiting time of patients in various departments and recommendations to reduce it.

- To determine the average time spent by the patients.
- To study the causes of delays and suggest interventions.
- To assess the patient's satisfaction in various department.
- To reduce the waiting time of the patients in the OPD, Emergency, Sample Collection, Department.

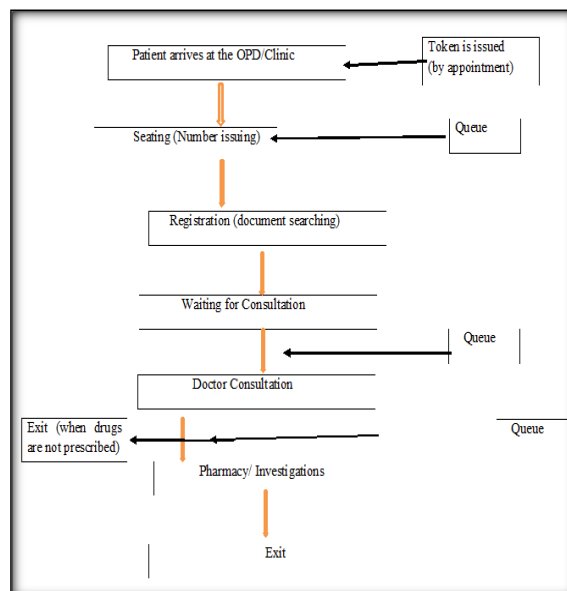
### Scope and Limitations of the Study

- The primary activity of the hospitals is providing medical, diagnostic and treatment and also specialized accommodation services to the patients. The Secondary activities of the hospitals provide wide variety of outpatient services at patient satisfactory level where the peak time of OPD is calculated and reschedule OPD's work accordingly done in order to reduce peak work load of the healthcare staffs.
- The limitation of project for the period of one month.
- The administration and management activities reported here are based on the direct observation carried out during the internship period.

### Example: Flow of patients (Emergency department)



### Example: Flow of patients (OPD)



## MATERIALS AND METHODS

### Research Methodology

The study is exploratory in nature. It involved a survey of patients in the Out Patient department, Emergency Department, sample collection of a Mahatma Gandhi Medical College & Hospital in Jaipur. Data was collected by research method through Tool (Out Patient Department, Emergency Department, Sample Collection) with patients for a period of one month. The collected data was analyzed using average analysis and mean analysis method.

## RESULTS

**Table 1: Outpatient department (OPD)**

OPD Waiting Time			Patient arrival in the OPD after registration (T1)	Time when doctor start initial assessment of patient (T2)	Waiting time (T2-T1)
Date	Unique ID	Patient Name			

**Table 2: Diagnostic department**

Diagnostic Waiting Time					
Date	Patient name	Unique ID	When Patient Arrival at Reception Counter of Diagnostic (T1)	When Patient went in diagnostic Room (T2)	Total Time (T2-T1)

**Table 3: Emergency department**

Emergency Time of Initial Assessment							
Date	Patient Name	Unique ID	Time When The patient Arrived in the Department (T1) the Department (T1)	Time When the Doctor begin initial assessment (T2)	Time when the Nursing Staff begin initial assessment (T3)	Initial assessment time of doctor (T2-T1)	Initial assessment Time of nursing staff (T3-T1)

### Inclusion and Exclusion Data

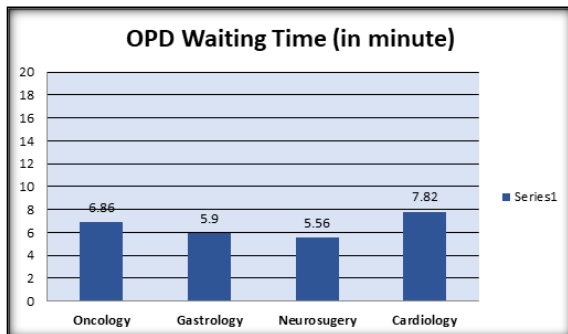
Data Has Been Collected Only from Three Departments Which Were Allocated by The Hospital Guide. The Three Department Studies Are:

- Emergency Department
- Out Patient's Department
- Sample Collection

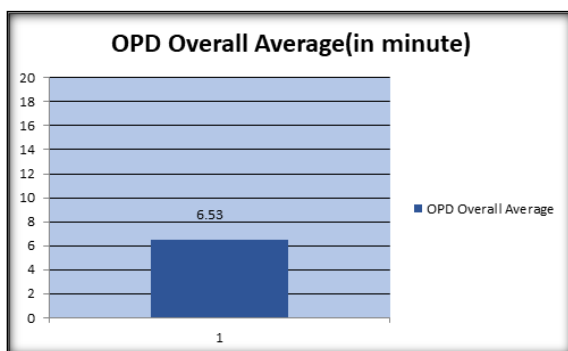
### Sample Size

The Sample Has Been Taken from The Patients Reporting to The Outpatient's Department of the Hospital. 200 Samples Were Taken from Opd, 200 From Sample Collection and 100 From Emergency.

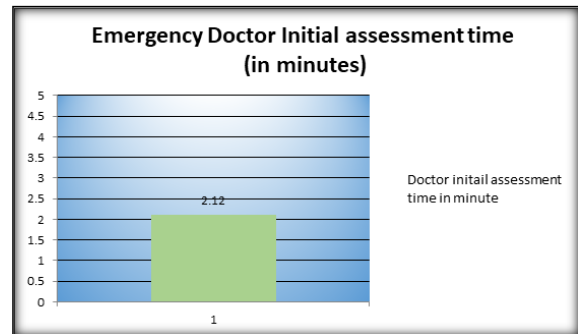
### Data Analysis



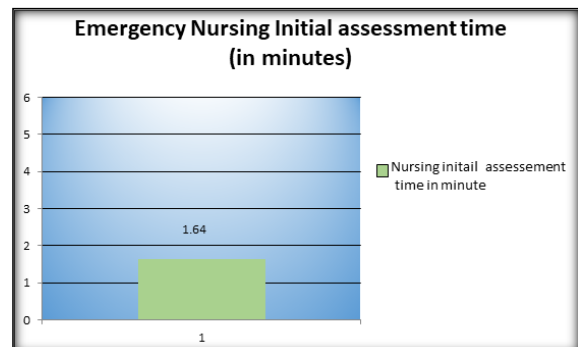
**Figure 1: Out Patient Department**



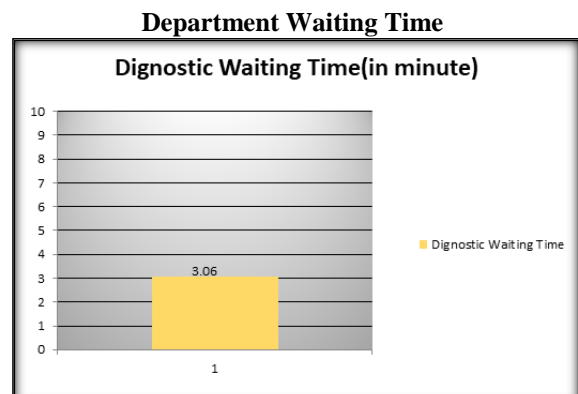
**Figure – 2 OPD Overall average**



**Figure 3: Emergency Doctor initial assessment time**



**Figure 4: Emergency Nursing initial assessment time**



## Findings

- The study is conducted in a 1450 bedded multi special hospital at Jaipur. This esteemed hospital is well known for its multitude of services. The hospital is equipped withal modern technologies

and rendering excellent services at an affordable cost.

- The maximum count of people arrives between 9 am-1pm in the hospital and the maximum number of people arriving is on Monday.
  - Peak time

Department	Time	Time	Day
OPD	9am – 1pm		Monday
Sample collection	11am -1 pm		Monday

- The study regarding maximum waiting time for emergency department reveals that 20% of the respondents mentioned 3-4mins; 40 % said 2-3 minutes; 40% said 1-2 minutes.
- The study regarding maximum waiting time for OPD in various department (cardiology department on an average waiting time 7-8 minutes) and Neurosurgery department on an average waiting time 5-6 minutes) and Gastrology department on an average waiting time 5-6 minutes) and Oncology department on an average time 6-8 minutes).
- The study regarding maximum waiting time for sample collection reveals that 25% of the respondents mentioned 3-4 minutes, 45% said 2-3 minutes and 30% said 1-2 minutes.
- Queuing method is followed for reducing waiting time in OPD, sample collection, Emergency department.

## CONCLUSION

The mean waiting time was calculated in OPD, Emergency and sample collection for various departments from the survey collected. The patients were satisfied OPD, Emergency and sample collection departments with the services provided to them. Our observation reveals that many patients easily finding the various OPD. On an average 6-8 minutes of waiting time the various OPD and on average 2-3 minutes of waiting time the sample collection department and on average 1-3 minutes of waiting time the Emergency Department. The waiting time of hospital is met as per hospital policies due to availability junior doctors. as well as senior doctors in the departments.

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