

# A Study on Patient Turnaround Time at Oncology Out-Patient Department in a Multispeciality Hospital

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## Abstract

The initial point of contact in a hospital is the outpatient department (OPD). Patient satisfaction and the care received in the OPD are indicators of the hospital's level of service. The amount of time a patient spends in a facility from the time they arrive at the registration desk until they depart for the last service is known as OPD waiting time. Patient discontent is substantially impacted by lengthier wait times. A checklist was created to track every minute that patients spent in the OPD, and data was gathered via direct observation to determine the average turnaround time. In this study, 200 samples, including both appointment patients and walk-ins, had their turnaround times examined. As a result, appointment patients had to wait longer than usual due to their early presence at the OPD, 45 minutes was recorded as the average turnaround time.

**Keywords:** waiting time, patient dissatisfaction, delayed appointments

## 1. Introduction

The section of a hospital that is typically busiest is the outpatient department (OPD). The wait time for appointments, a lack of receptionists, and an erratic flow of walk-in patients are among the common issues. The amount of time a patient must wait before actually leaving the out-patient department (OPD) is referred to as the patient's waiting time. The OPD is where patients spend a significant amount of time while they wait for doctors and other allied health professionals to provide treatments. The standard of the waiting experience has a significant impact on how satisfied health consumers are with the service they received.

### 1.1 Patient Turnaround Time

The time from when a patient enters the outpatient department till they leave is referred to as "patient turnaround time". It serves as a quality indicator to assess the efficacy and efficiency of the high standard of treatment offered at the OPD. Gaining insight into the causes of delays is made easier by keeping track of turnaround time variations. this can be helpful in enhancing patient care in various areas.

### 1.2 Patient waiting time

Patient waiting times have recently become into an unavoidable problem for OPDs. Long wait times are seen by patients as a barrier to receiving treatments, and keeping them waiting too long might make them unhappy. Thus, the hospital's quality management system heavily depends on patient satisfaction

with waiting times. Even though they make an appointment before their appointment to avoid a long wait, they might still expect a longer wait.

### **1.2.1 Factors causing waiting time**

Some factors that affects the waiting time at out-patient department are insufficient staffing, server error and printer issues in billing, unexpected flow of walk-in patients, unavailability of doctors during OPD timing.

### **Objective of the study**

- To study on turnaround time of patients in the oncology out-patient department
- To find out the reasons for delay in consultation process
- To suggest measures to overcome the delay at OPD, oncology

## **2. Literature Review**

According to N Sharma (2020), evaluated that the Patients who registered online reported being three times more satisfied than those who registered in person. This study was carried out to determine whether the implementation of an online computerized registration system had any effect on patient satisfaction and the length of the outpatient registration wait time.

According to N Kortbeek (2014), the results of two models, one for the day process that governs scheduled and unscheduled arrivals and one for the access process of scheduled arrivals, are used to iteratively calculate appointment schedules that balance the waiting time at the facility for unscheduled patients and access time for scheduled patients.

According to Anastasia (2014), studied that since morning patients had to wait a long time due to issues with appointment time delays, it was found that patients who visited the OPD in the afternoon were happier than those who did so in the morning..

## **3. Methodology**

This is a descriptive research that aims to describe the characteristics or behavior of the patients in a selected hospital. The simple random sampling is used in order to collect data. Over the course of the study's one month duration, 200 sample data were gathered from a population of 500. The data was collected through direct observation which involved tracking of patient's arrival and departure times using a checklist and a watch.

### **3.1 Analysis and tools**

#### **3.1.1 Bar Graph**

A graph with rectangular bars whose heights or lengths are proportionate to the numbers they represent, used to display categorical data. The turnaround time for both scheduled appointments and walk-in patients at the oncology out-patient department was developed in this study's bar graph.

#### **3.1.2 Simple percentage analysis**

A special kind of ratio is a percentage. When comparing two or more data series, percentages are used. Percentage is used to describe relationships and can be compared in terms of how two or more series of data are distributed.

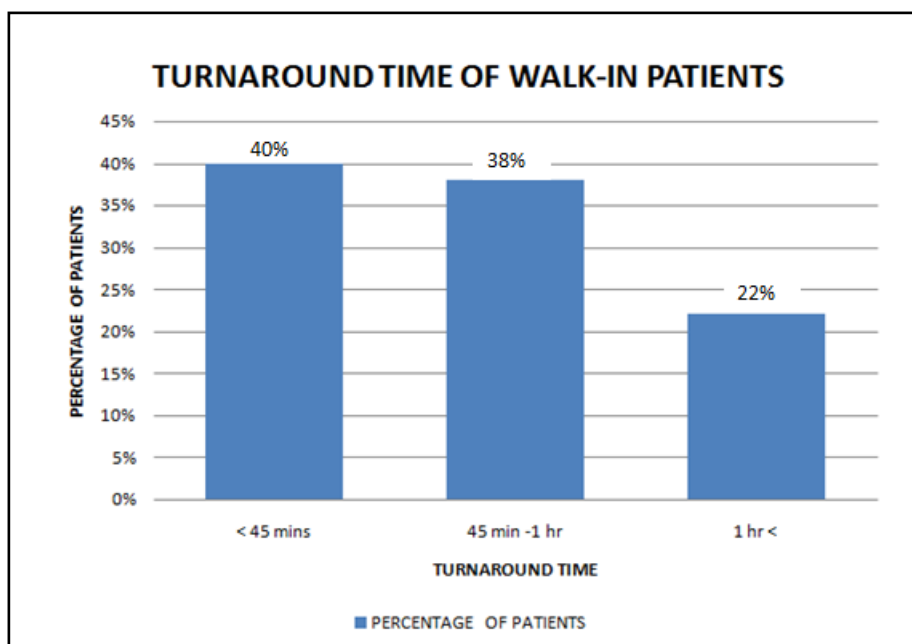
$$\text{Percentage of patients} = (\text{number of patients} \div \text{total patients}) \times 100$$

#### 4. Analysis

**Table 1: Table representing the turnaround time of walk-in patients**

Turnaround time	Number of patients	Percentage of patients
Less than 45 minutes	40	40%
Between 45 minutes to 1 hour	38	38%
More than 1 hour	22	22%
<b>Total</b>	<b>100</b>	<b>100%</b>

**Chart 1: Chart showing the turnaround time of walk-in patients**

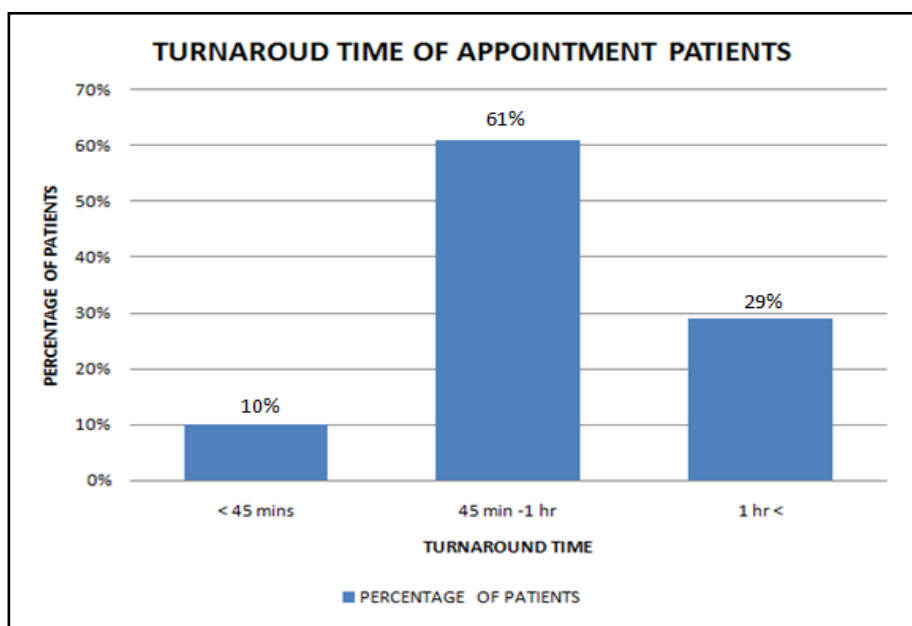


According to the graph above, 40% of patients had a turnaround time of less than 45 minutes, 38% had a turnaround time of between 45 and 1 hour, and 22% had a turnaround time of more than an hour. Most of the walk-in patients were follow-up patients and patients admitted for chemotherapy thus their consultation time would be less. The arrival time of walk-in patients were observed after late morning when there won't be a large waiting period. Thus maximum turnaround time of walk-in patients was less than 45 minutes.

**Table 2: Table representing the turnaround time of appointment patients**

Turnaround time	Number of patients	Percentage of patients
Less than 45 minutes	10	10%
Between 45 minutes to 1 hour	61	61%
More than 1 hour	29	29%
<b>Total</b>	<b>100</b>	<b>100%</b>

**Chart 2: Chart showing the turnaround time of appointment patients**



The above chart shows that turnaround time of 61% of patients were between 45 minutes to 1 hour, 29% of patients were more than 1 hour and 10% of patients were less than 45 minutes. The early arrival of appointment patients at the OPD leads to longer turnaround time. As most of the appointment patients were new patients their consultation time were observed to be longer than follow-up patients. The primary cause of delayed appointment times and the factor causing the longest turnaround time for appointment patients was discovered to be the doctor's unavailability due to emergency meetings and doctor visits to in-patient wards. The maximum turnaround time of appointment patients was observed within 45 minutes to 1 hour.

## 5. Findings

- In the billing procedure, 38% of patients waited longer than 4 minutes, 36% waited less than 4 minutes, and 26% waited 4 minutes or less.
- The turnaround time for walk-in patients was seen to be 40% less than 45 minutes, 38% within 45 minutes and an hour, and 22% greater than an hour.
- The turnaround time for appointment patients was seen to be 61% within 45 minutes to 1 hour, 29% more than 1 hour and 10% less than 45 minutes.

- The delayed appointment time was noted with 43% of patients waiting between 15 and 1 hour, 28% waiting under 15 minutes, 21% waiting more than 1 hour, and 8% waiting longer than 2 hours.
- In medical oncology, 55% of patients waited between 45 and 1 hour, 31% waited under 45 minutes, and 14% waited longer than 1 hour.
- In surgical oncology, 35% of patients waited 45 minutes to an hour or less, 54% waited less than 45 minutes, and 11% waited longer than an hour.
- In radiation oncology, 57% of patients waited 45 minutes to an hour or less, 29% waited less than 45 minutes, and 14% waited longer than an hour.
- While walk-in patients typically have a turnaround time of less than 45 minutes and appointment patients typically have a turnaround time of 45 minutes to an hour, the average turnaround time is 45 minutes.
- When compared to surgical and radiation oncology, the turnaround time for medical oncology is longer.

## 6. Recommendations

- Providing thorough information on the online payment option for consultations when making an appointment for a time in advance through the portal, this can cut down on the time wasted in OPD billing.
- Recruiting more doctors to the medical oncology section is necessary due to the inappropriate doctor-patient ratio.
- Scheduling appointment times with breaks in between to accommodate walk-in patients or doctor visits to inpatient units.
- The management of the hospital should think about adding more seating areas and older patient beds as a way to improve the facilities and minimize the impact of waiting times.
- When a doctor is not available right away, patients should be told how long they would have to wait before receiving services in order to avoid feeling frustrated by extended wait times.
- Providing patients in the oncology OPD leisure options like television, periodicals, and newspapers is another strategy to combat the effects of waiting time.

## 7. Conclusion

From the above study, it is found that patients in oncology OPD have to wait longer. Even though the patients wanted anything to change that would make them more comfortable, they are happy with the hospital's current amenities. Longer wait times are a severe problem that lowers patient satisfaction levels when they use the outpatient department's services, thus there needs to be a lot of focus on this issue and uniformity of the management procedure. As a result, this study provides ideas and recommendations that can be put into practice to shorten patient's wait times at outpatient departments while still delivering high-quality patient care.

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