# A Study on Turnaround Time Analysis in Immigration Health Check Department, In One of the Leading Hospitals in Bangalore

Dr. V. Uma<sup>1</sup>, R. Rama<sup>2</sup>

<sup>1</sup> Head, Department of Hospital Administration, Dr. N.G.P Arts and Science College <sup>2</sup> Student, Department of Hospital Administration, Dr. N.G.P Arts and Science College

Date of Submission: 01-05-2023 Date of Acceptance: 08-05-2023

ABSTRACT: Turnaround time is defined as the whole time a patient spends at the immigration department from the time of arrival to the time they leave; this only includes patients who have appointments. It has recently become a problem in the Immigration health check department for patients to wait for their documents to upload and for those records take a long time to upload to the Embassy. Because of this, the quality management in hospitals heavily depends on the satisfaction of patients with waiting times. Despite having a medical exam before applying for a visa to avoid a long wait, patients should still expect a longer wait time because the regular time intervals between processes are not being followed. The review will briefly explore the causes of patients' higher wait times, the delay in document uploading to embassy, and the reason behind it.

**Key word:** Turnaround time, Documents, Embassy, Time interval.

## 1. INTRODUCTION:

## **A. Definition:**Immigration health check:

The medical expert will enquire about your lifestyle, family history, and do a physical examination. Whether an application is eligible depends on whether they meet the health requirements. Countries for immigrations are: Australia, Canada, UK, New Zealand & Korea.

#### **B. Function:**

**I.BILLING:** the process of collecting patient information and processing payment for the health examination.

**II. HEALTH INVESTIGATION:**It is conducted according to the requirements of the embassy. It includes a chest X-ray, a urine analysis, an HIV test, a syphilis test, and a blood test.

**III.DOCTOR CONSULTATION:** The patient's medical condition will be examined by the doctor.

**IV. DOCUMENTATION:** Once the patient signs the client declaration form and provides the necessary paperwork, an eMedical ID is created for each patient.

**V. UPLOADING DOCUMENT:** In the eMedical site, documents and medical reports are uploaded.

**C. "Patient turnaround time"** is defined as the period of time from when a patient enters the department and when they leave.

Turnaround time = Departure time - Arrival time. I)Factors leading to waiting times, following are some reasons

- a. Patients' arrival times.
- b. Doctors' availability during the scheduled period.
- c. Inadequate staffing.
- II) Factors influencing uploading time:
- a. Delay in X-ray reports.
- b. Requests for more tests from the embassy.
- c. Staff manual errors.
- III) Waiting time management, the following factors need to be considered.
- a. Implement a method for controlling queues.
- b. Be honest and frank with your patient.
- c. In order to speed up the servicing procedure, provide appointment scheduling.

## **D. OBJECTIVE:**

- To study onturnaround timeof patients in the immigration health check
- To find out the reasons for delay in uploading documentation process
- To give suggestion for improving the turnaround time (TAT)

## **II. REVIEW OF LITRATURE:**

According to Mensur Biya et.al<sup>1</sup> (2022), the waiting time of patients was influenced by their educational status, place of residence, arrival time, and the date of their visit.

## **International Journal of Advances in Engineering and Management (IJAEM)**

Volume 5, Issue 5 May 2023, pp: 123-127 www.ijaem.net ISSN: 2395-5252

According to M Sengupta et.al<sup>8</sup> (2019), the concept that developing creative mitigation methods on proper and timely communication, current technological understanding, improving hospital procedures for improved operational processes, and staff collaboration can improve patients' experiences in the outpatient department has been reviewed.

According to Boland et.al<sup>10</sup> (2008), they want faster report turnaround times (RTAT), and any delay in delivering the full report reduces the value of a radiology department. Traditional reporting techniques are generally inefficient; thus, RTAT will be able to meet customer needs on a continual basis only by deploying an integrated radiology information system (RIS)/picture archiving and communication system (PACS) and voice recognition (VR) systems. VR systems also

make it possible to create consistent, higher-quality reports.

## III. METHODOLOGY: RESEARCH DESIGN:

The framework or plan for a study that directs the data gathering and analysis is called a research design. It is a process that is followed in order to complete a study. The researcher used a descriptive research design for their project.

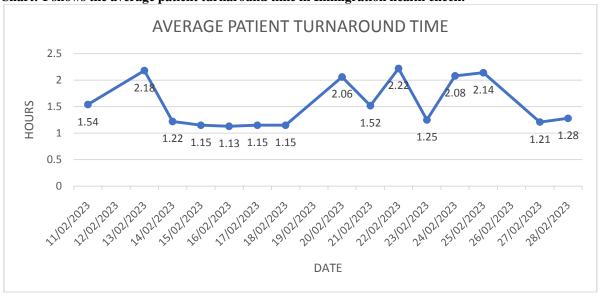
## **SAMPLE SIZE:**

Due to convenience and time limitations, the sample size of 150 (primary data) provides an accurate representation of the population.

## **SAMPLING TECHNIQUE:**

For the current study, simple random sampling was chosen as the sample technique.

## IV. ANALYSIS: Chart: 1 shows the average patient turnaround time in Immigration health check:

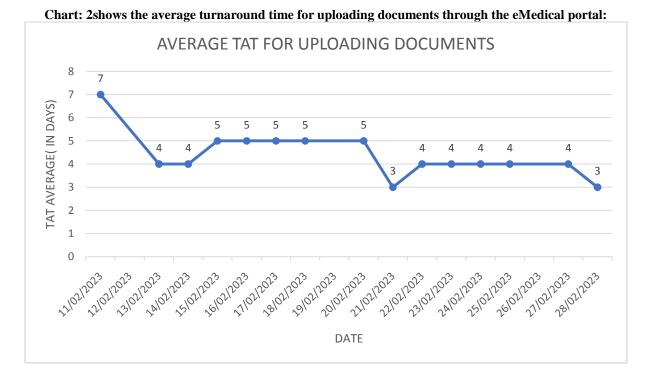


#### INTERPRETATION:

The following data shows that the greatest waiting time for patients on 22-02-2023 is 2 hours 22 minutes, while the lowest waiting time is 1 hour 13 minutes on 16-02-2023. This delay was caused

by doctor unavailability at the appointment time, as well as patients arriving late to the OPD. Delay in filling the form for a particular country. There is no enough patient guidance.

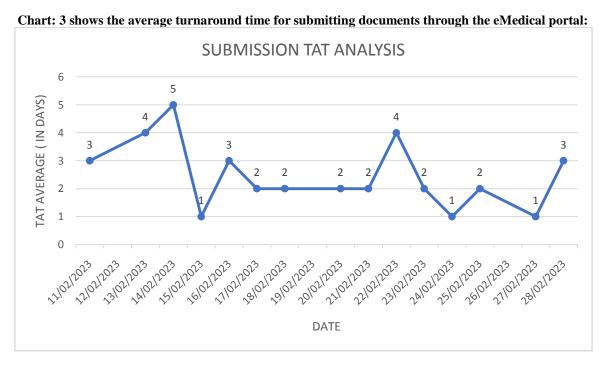




## INTERPRETATION:

According to the data above, the highest delay in uploading documents is 7 days, while the shortest wait is 3 days. This delay was caused by

the radiologist's inability to prepare reports, a human error made by staff, and a technical issue related to the portal. There is no formal training for new employees to upload documents.



## INTERPRETATION:

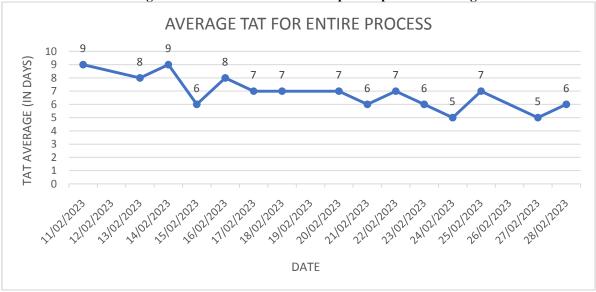
The longest delay for submitting documents from the doctor's side is 5 days, while the lowest wait is 1 day, according to the data

provided above. This delay was caused by the embassy's request for further tests, which required them to do additional tests. It is being delayed due to some emergency cases.

## International Journal of Advances in Engineering and Management (IJAEM)

Volume 5, Issue 5 May 2023, pp: 123-127 www.ijaem.net ISSN: 2395-5252

## Chart: 4 shows the average turnaround time for the entire patient process in immigration health check:



#### INTERPRETATION:

According to the data above, the highest delay in uploading documents is 9 days, while the shortest wait is 5 days.

## V. FINDINGS:

- i. In billing, the greatest waiting time for patients on 22-02-2023 is 2 hours 22 minutes, while the lowest waiting time is 1 hour 13 minutes on 16-02-2023.
- ii. In uploading documents, the highest delay in uploading documents is 7 days, while the shortest wait is 3 days.
- iii. The longest delay for submitting documents from the doctor's side is 5 days, while the lowest wait is 1 day.
- iv. In entire process, the highest delay in uploading documents is 9 days, while the shortest wait is 5 days.

## IN APPOINTMENTS:

- 1. Appointment patients are unaware of the procedure before billing and are taking long time for filling the forms. As a result, the billing procedure is delayed by 20 minutes.
- 2. There is no new information on document requirements on the hospital's website.
- 3. Inconsistent allotment of appointment patient slots throughout a week, resulting in unequal patient flow on each day.

## IN BILLING:

- 1. The maximum period of waiting was 15 minutes.
- 2. A printing error has occurred.

- 3. There are troubles with the server.
- 4. insufficient billing staff.

## IN CONSULTATION:

- 1. Before consulting the doctor, completing the other processes on the track sheet.
- 2. In between OPD appointments, doctors leave for IPD rounds

## IN DOCUMENTATION:

- 1. Submitting documents without completing the entire process.
- 2. Taking immigration documents without submitting them.

## IN UPLOADING:

- 1. The radiologist's inability to prepare reports
- 2. Human error committed by staffs.
- 3. Technical issue related to the portal.
- There is no formal upload training for new staff.

## VI. SUGGESTIONS:

- 1. Providing full consultation information while booking previously appointments through the portal, which can eliminate unnecessary billing time.
- 2. Updating information on documents, packages, and submission days under each category under the country's sign on the website.
- 3. Scheduling appointment slots with time intervals so that they can be encaged all days so that one day doesn't feel rushed.



## International Journal of Advances in Engineering and Management (IJAEM)

Volume 5, Issue 5 May 2023, pp: 123-127 www.ijaem.net ISSN: 2395-5252

- 4. Allocating billing staff can improve patients waiting times and help patients to understand the track sheet process.
- 5. Always keep a backup in case of a technical failure
- 6. Ask patient to follow the track sheet and sent to the doctor for consultation between the first two processes.
- Patients should be notified about how long they will have to wait to receive treatments in the event of delayed doctor availability, so that they do not become frustrated as a result of extended waiting time.
- 8. When submitting documentation, ensure that they have finished the entire process and notify them that the document must be submitted at the documentation room while billing.
- 9. Extend the X-ray room staff's working hours to 3 p.m. regularly.
- 10. Allocate separate staff for the Health Check Department to type the X-ray report.
- 11. Training a new employee can enhance performance, which can reduce turnaround time.

## VII. CONCLUSION:

Longer waiting times are a critical issue that impacts the satisfaction level of patients seeking services at outpatient departments, thus much attention must be paid to this issue, as well as standardisation of management processes. Thus, this study shows the probable improvements and ideas that may be adopted to reduce patient waiting times and delay in uploading documents at outpatient departments, while providing excellent health care service.

#### **REFERENCE:**

- [1]. Mensur Biya<sup>1</sup>, Matebu Gezanhagn<sup>2</sup>, et al., 2022. Waiting time and its associated factors in patients presenting to OPDs at public hospital of Jimma Zone, Southwest, Ethiopia. BMC Health Service Research
- [2]. Nitika Sharma<sup>1</sup>, Arun K Aggarwal<sup>2</sup>, 2022. Association of waiting time and satisfaction level of patient with online registration system in a tertiary level medical institute outpatient department. Health Policy and Technology; 11:100687.
- [3]. Muhammad Ahmed Kalwar<sup>1</sup>, Mohammad Saad Memon<sup>2</sup>, Muhammad Ali Khan<sup>3</sup>, 2022. Association of comfortable waiting times of patients in Queue with Diverse demographics at large hospitals outpatient department. International Journal of

- Science and Engineering Investigations, 11(127), 2251-8853.
- [4]. DPIM Pathirana<sup>1</sup>, Nayantara de Silva<sup>2</sup>, 2022. Efficient workplace planning and designing strategies to reduce waiting time in the outpatient departments of government hospitals in Sri Lanka. Ceylon institute of builders Sri Lanka.
- [5]. Kambombo Mtonga<sup>1</sup>, Antoine Gatera<sup>2</sup>, Kayalvizhi jayavel<sup>3</sup>, et al., 2022. Adaptive Staff Scheduling at outpatientdepartment ofNtaja health centre in Malawi- A queuing theory application. Journal of public health research, 11(2), 2021-2347.
- [6]. Komal Aqeel Safdar1, Ali Emrouznejad2, Prasanta Kumar Dey3, 2020. An optimized queue management system to improve patient flow in the absence of appointment system. International Journal of Healthcare Quality Assurance, 33, 477-494.
- [7]. A Aburayya<sup>1</sup>, M Alshurideh<sup>2</sup>, A Albqaeen<sup>3</sup>, et al., 2020. An investigation of factors affecting patients waiting time in primary healthcare centres: An assessment study in Dubai. Management Science Letters, 10(60), 1265-1276.
- [8]. Mitali Sengupta<sup>1</sup>, Satya Jit Chakrabarti<sup>2</sup>, et al., 2019. Waiting time: The expectations and preferences of patients in a paediatric OPD. Journal of Health Management, 21(3), 427-442.
- [9]. Christoper A Alarcon-Ruiz<sup>1</sup>, Paula Heredia<sup>2</sup>, Alvaro Taype-Rondan<sup>3</sup>, 2019. Association of waiting and consultation time with patient satisfaction: Secondary-data analysis of a national survey in Peruvian ambulatory care facilities. BMC Health Services Research, 19, 1-9.
- [10]. Boland, G. W. L., Guimaraes, A. S., & Mueller, P. R. (2008, March 8). Radiology report turnaround: expectations and solutions. European Radiology, 18(7), 1326–1328. https://doi.org/10.1007/s00330-008-0905-

https://doi.org/10.1007/s00330-008-0905