

**“A Study on Turn Around Time for Initial Assessment of Inpatients by
Medical Officers at Medanta Hospital, Lucknow”**

Dissertation Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree of
Master of Business Administration (MBA)

In
Hospital and Health Management

By
Ronit Parashar
Under the Supervision and Guidance of
-Dr. Deepti Sharma
(Associate Professor, IIHMR University)

2023

DECLARATION BY STUDENT

I hereby declare that this dissertation titled “**A Study on Turn Around Time for Initial Assessment of Inpatients by Medical Officers at Medanta Hospital, Lucknow**” is the bonafide record of my original researchwork. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.



(Signature)

Name of Student : **Ronit Parashar**

Date: 29 May 2023



Dated - May 27, 2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Ronit Parashar has completed his internship in Quality Department at Medanta Lucknow from February 27, 2023 to May 27, 2023.

During his internship he has demonstrated his skills with self-motivation to learn new skills. His performance exceeded our expectations and he was able to complete the project on time.

We wish him all the best for his upcoming career.

FOR MEDANTA HOLDINGS PVT. LTD.

Lily Sahota

Lily Sahota
General Manager
Human Resources



Accredited by



H-2022-0336
Apr 9, 2022 - Apr 8, 2026

For Emergency & Ambulance: Dial @ 1068

Medanta - Lucknow
Medanta - Gurugram

✚ Sector - A, Pocket - 1, Shushant Golf City, Amar Shaheed Path, Lucknow
✚ Sector - 29, Gurugram, Haryana, India

☎ 0522 4505 050

☎ 0124 4141 414

Regd. Office: Medanta Holdings Private Limited, E-18, Defence Colony, New Delhi - 110024, India. Tel: 011 4411 4411

✉ info@medanta.org

www.medanta.org

Corporate Identity Number - U72400DL2012PR0250073

Medanta Network: Gurugram | Delhi | Lucknow | Patna | Indore | Ranchi | Noida*

CERTIFICATE

This is to certify that **Ronit Parashar** in partial fulfillment of the requirements for the award of the degree of **MBA (Hospital and Health Management)** from the IIHMR University, Jaipur has successfully completed his internship at **Medanta Hospital, Lucknow** during February 27- May 27, 2023.

Place:

Preceptor/Head of the Organization
Name of the organization

Date:

CERTIFICATE

This is to certify that dissertation titled “**A Study on Turn Around Time for Initial Assessment of Inpatients by Medical Officers at Medanta Hospital, Lucknow**” is a record of the research work undertaken by **Ronit Parashar** in partial fulfillment of the requirements for the award of the degree of **MBA (Hospital and Health Management)** from the IIHMR University, Jaipur under my guidance and supervision and his/her approach to the research study has been sincere, scientific, and analytical.

Faculty Guide
IIHMR University, Jaipur

Date

School Dean
IIHMR University, Jaipur

Date

Abstract

Background

The initial assessment of patients admitted to the inpatient department should be conducted by the medical officers within 120 minutes of their admission, as per the prescribed standards. This assessment is essential for figuring out the patient's health, history, and symptoms as well as for creating an effective care plan. The amount of time needed for the evaluation, however, may differ based on variables including hospital procedures, patient acuity, and resource availability, but it should be done within 120 minutes.

Objectives

1. To assess the time for initial assessment of inpatients by medical officers in inpatient department.
2. To identify all those factors that significantly contribute to the delay in initial assessment by medical officers.
3. Developing and implementing an interventions that will reduce the time spent on initial assessments by medical officers in hospitals.
4. Identify the effectiveness of the intervention in reducing the initial assessment time by medical officers in inpatient departments.
5. Identification of challenges and barriers encountered during the implementation of the intervention and suggestions on how to overcome them.
6. Recommend strategies for reducing the time of initial assessment by medical officers in inpatient departments.

Methods

It was a cross sectional study, covering a span of two and a half months (March 10, 2023 to May 25, 2023). A total sample of 283 in- patient admissions were selected through convenient sampling method for the study. Only the elective inpatients were included in this study while the emergency, day care, dialysis and chemo admissions in hospital were excluded.

Result

This study's objective was to assess the length of time required for medical professionals to conduct initial assessments of inpatients at Medanta Hospital in Lucknow and to pinpoint the causes of assessment process delays. The study also attempted to design and put into practise strategies to shorten the duration of initial assessment. It was shown through a cross sectional study that the average initial assessment duration was 155 minutes, which was more than the suggested maximum of 120 minutes. Staffing and workload, communication difficulties, triage and prioritisation problems, resource and equipment availability, documentation requirements and administrative procedures, organisational constraints, training and competency issues were all identified as significant contributors to the delay in initial assessment. Numerous interventions, including streamlining the triage process, implementing standardised assessment procedures, optimising staffing and workflow, improving information accessibility, enhancing communication and collaboration, utilising point-of-care testing, offering education and training, implementing telemedicine solutions, carrying out continuous quality improvement, and creating a supportive organisational culture, have been recommended as solutions to these problems. Evaluation of the intervention's efficacy revealed a 116-minute shorter duration of initial assessment time.

Nevertheless, obstacles and challenges were encountered during the implementation, such as workload and time restraints, collaboration and communication problems, documentation and information management challenges, education and training requirements, resistance to change, staffing and resource availability issues, technological issues, workflow and process design issues, patient-related considerations, and external variables.

Implementing effective triage systems, streamlining admission procedures, ensuring optimal staffing, utilising technology, implementing standardised assessment protocols, encouraging interdisciplinary collaboration, establishing effective communication systems, offering ongoing education and training, monitoring and evaluating procedures, and fostering a culture of continuous quality improvement are just a few of the strategies that were suggested to address these issues.

This study concludes by highlighting the significance of prompt initial assessment by medical officers and by offering insights into the root causes of delays. The suggested interventions and tactics could speed up the process of initial assessments and enhance the quality of patient care in inpatient department.

Acknowledgement

“Appreciation is a wonderful thing: it makes what is excellent in others belong to us as well.”

- Voltaire

Words of acknowledgement, however many they might be, are insufficient to express the gratitude I feel towards the people who have constantly supported me in successfully completing my dissertation in these unforeseen and unpredictable circumstances.

First and foremost, I would like to sincerely thank Dr. Ashish Pawar (Deputy General Manager, Quality Department), my mentor in Medanta Hospital, Lucknow, Dr. Pragya Mishra (Assistant Manager), Mrs Tripti Gupta (Deputy Manager) & Mr Abhinav Sahay (Assistant Manager) for their valuable guidance and constant encouragement, which enabled me to complete this project in time. Without their support, the completion of this project was impossible.

I would also like to express my gratitude to my academic guide, Dr. Deepti Sharma (Associate Professor, IIHMR, University), who provided me with all the assistance needed for the completion of my dissertation.

I would also thank the Academic Committee and Placement Committee for their assistance wherever necessary.

In the end, I would like to extend my heartfelt gratitude to my friends and family, who were like a pillar of support for me, and without whom, the completion of this project was difficult.

TABLE OF CONTENTS

S. NO.	TOPICS	PAGE NO.
1.	List of Figures	ix
2.	List of Tables	ix
3.	Abbreviations	x
4.	Introduction	1
5.	Literature Review	3
6.	Research Objective	13
7.	Research Methodology	13
8.	Results and Discussions	14
a.	Objective 1	14
b.	Objective 2	15
c.	Objective 3	22
d.	Objective 4	30
e.	Objective 5	34
f.	Objective 6	37
9.	Result and Conclusion	40
10.	Annexure	42
11.	Bibliography	43

LIST OF FIGURES & TABLES

S. NO.	TOPICS	PAGE NO.
Table 5.1	Summarized Version of Review of Literature	5
Fig.8.1	Average Turn Around Time of Initial Assessment by Medical Officers (March - April)	14
Fig.8.2	Average Turn Around Time of Initial Assessment by Medical Officers (April-May)	30
Fig.8.3	Comparative Analysis of Average Turn Around Time of Initial Assessment by Medical Officers (March-May)	32

ABBREVIATIONS

- **MO :** “Medical Officers
- **NABH:** “National Accreditation Board for Hospital and Healthcare Providers”
- **MS :** “Medical Superintendent”
- **ED:** “Emergency Department”
- **IPD:** “In-Patient Department”
- **IP:** “In – Patients”
- **KPI:** “Key Performance Indicator”
- **TAT:** “Turn Around Time ”
- **ISQua:** “International Society for Quality in Healthcare”

Introduction

The initial assessment of an inpatient is a crucial step in determining the best course of treatment. It involves assessing the patient's condition, history, and symptoms. The length of this examination may depend on a variety of factors, including the patient's health and medical history.

A medical officer should, in general, perform the initial assessment of an inpatient as soon as the patient is brought into the hospital. This is critical because the data acquired during the evaluation will help direct the patient's care and treatment and can also reveal any urgent or life-threatening issues that need to be attended to right away.

The duration of the initial assessment as per the prescribed standards is within 120 minutes of the patient's admission. The assessment process can be streamlined and finished more quickly in some institutions because they have set rules and guidelines that outline the actions that should be performed.

Sometimes, a team of medical professionals—a doctor, a nurse, and a respiratory therapist—will do the initial assessment. This teamwork ensures that every aspect of the patient's sickness is evaluated and taken into consideration, which can lead to a more accurate diagnosis and more effective treatment plan.

The state and degree of acuity of the patient may also have an impact on how long the initial assessment takes. For instance, a patient with a serious or life-threatening ailment would require emergency care, which could impact how long the examination takes.

Contrarily, a patient with a less serious ailment might need a more thorough examination to decide on the best course of therapy, which could also affect how long the assessment takes.

The accessibility of resources is another element that may have an impact on how long the initial examination takes. The assessment process could take longer, for example, if the hospital lacks staff or resources. The medical personnel may also be busy and unable to complete the test as quickly as they would like if the hospital is seeing a lot of people.

Nonetheless, in general, medical staff should try to complete the initial assessment as quickly and efficiently as possible while still making sure that each element of the patient's health is properly assessed and properly documented. By doing so, chances of undesirable events or difficulties can be reduced while improving patient outcomes.

The amount of specificity and rigour of the evaluation are two important factors. A thorough initial assessment should consider the patient's whole medical history, present condition, family history, social history, past medical history, past surgical history and any possible dangers. This might entail requesting more testing or imaging examinations, speaking with experts or other medical professionals, and carefully going over the patient's medical records.

Another important element is communication with the patient's family or other carers. By fostering trust and rapport, open communication with patients can boost adherence to treatment plans and enhance overall outcomes.

Any safety risks or worries should also be known to the medical officer so that preventative measures can be made to lessen them. A complex plan could necessitate more preparations to conduct tests or monitoring, the implementation of safety measures, or team member consultations.

The medical officer must accurately and concisely document the patient's initial assessment and recommended course of therapy in the medical file. Additionally, the medical record and therapeutic plan can be saved for future use, aiding in the maintenance of continuity of care, boosting professional communication, and enhancing patient care.

Medical officers must pay special attention to detail, communicate clearly, and have a complete awareness of the patient's past health history and current condition when conducting an inpatient examination. Medical officers can guarantee patients receive the best care and outcomes by conducting thorough and patient-centered assessments of patients.

In general, the length of time needed for a doctor to conduct the initial assessment of an inpatient may vary based on a variety of factors, including hospital policies and regulations, the patient's medical history and severity level, and the availability of staff. While making sure that every aspect of the health of the individual is properly investigated and taken into account, medical practitioners should always endeavor to complete the evaluation as quickly and efficiently as they can.

Literature Review

Singer AJ, Thode HC Jr., Viccellio P., et al. (2011) did a retrospective cohort analysis over a 4-year period to see whether a patient's risk of passing away improved with the amount of time they spent in the emergency room. In particular for people who had specific conditions, such as sepsis and stroke, the study indicated that longer boarding times were associated with a higher risk of mortality.

Dhaliwal et al. (2012) conducted a retrospective cohort study for a period of 1 year, the objective was to discover whether the length of the initial doctor's examination was a predictor of poor hospital outcomes. According to the study, longer wait times between patient doctor visits were associated with higher fatality rates, longer hospital stays, and transfers to intensive care units.

Onur OE, Koseoglu Z, Turhanoglu G, Yildirim M, Demirhan A. (2013) conducted a retrospective study for a period of 6 months, The objective of this research was to determine how long it takes for indoor patients to receive their initial medical evaluation when they attend emergency facilities. According to the report, there were 9 minutes on average between arrival and the initial medical evaluation. Compared to patients who arrived by other forms of transportation, the wait times for patients who arrived by ambulance were shortened.

Lee JH, Wu MY, Chiu YW, et al. (2014) conducted a retrospective study, the study glanced at the connection between the time it took for doctors to complete their initial evaluation and several other performance measures for the emergency department, including the time it took for patients to be seen by a provider and then transported to the imaging or laboratory. According to the study, longer door-to-provider, door-to-imaging, and door-to-laboratory timings are associated with longer periods for first physician examination.

Bhagat P, Gupta R, Sharma D. (2016) conducted a retrospective study for a period of 6 months , the objective of this research is to look into how quickly individuals who had a stroke when they were admitted to the hospital were initially assessed and how they were treated in the emergency room. The research discovered that patients hospitalised at night had a lengthier first evaluation period than those admitted at daytime.

Mirsaeidi et al. (2017) conducted a retrospective cohort study to assess the effect of a delay in the initial doctor's diagnosis on how soon hospitalised patients with community-acquired pneumonia receive antibiotics. According to the study, when patients' initial doctor assessments were postponed, it took them longer to receive antibiotic therapy for community-acquired pneumonia.

Liang B, Chen J, Li T, et al (2018) conducted a retrospective cohort study for a period of 2 years, the goal was to investigate the link between inpatient mortality in the Emergency Department and the timing of the medical officers' initial examination. According to the study, longer first assessments by doctors were associated with increased inpatient mortality in the emergency room. Patients who had to wait more than 30 minutes had higher death rates than those who got first examinations within 10 minutes.

Sharma et al. (2018) conducted a cross sectional study for a period of 6 months, the goal was to identify the elements that have an impact on how soon hospitalised patients receive their initial medical evaluation. The patient's age, gender, level of illness, day of the week of admission, and the interval until the initial evaluation were all shown to be significantly correlated in the research. Patients hospitalised on weekends had to wait longer for the initial assessment than those admitted on weekdays.

Zhu et al. (2018) conducted a retrospective cohort study for a period of 4 years, the objective of this study was to look into how fast people with acute pancreatitis were initially seen by a clinician and how it influenced their clinical outcomes. The study discovered a relationship between a delayed time to initial physician assessment and longer hospital stays, increased risks of pancreatic necrosis, and higher mortality rates.

Czaja et al. (2021) conducted a retrospective study for period of 6 months, the objective of this research was to look at the connection between the time it takes for a doctor to evaluate a patient and their length of stay at the emergency room. Longer physician evaluation times were connected to longer emergency department visits, according to the research. More specifically, for every minute a doctor spent reviewing a patient, the length of stay was increased by 1.5 minutes.

Table 5.1. Summarized Version of Review of Literature

Author (Year)	Study Location / Sample Size	Methodology	Salient Features	
			Objective	Results
Bhagat P, Gupta R, Sharma D. (2016)	Location: India Sample Size: 147 patients	Study Period: 6 months Study Design: Retrospective study Study Setting: Inpatient and Emergency department. Sampling Technique: Convenience sampling	The study's goal is to find out the timing of initial assessment and emergency department disposition of patients who were admitted to the hospital with a stroke.	The study found that the time of the initial medical assessment was longer for patients who were admitted during the night hours as compared to those who were admitted during the day hours, and a longer time for the initial medical assessment was linked with a higher risk of poor outcomes.

Onur OE, Koseoglu Z, Turhanoglu G, Yildirim M, Demirhan A. (2013)	Location: Turkey Sample Size: 1652 Indoor patients	Study Period: 6 months Study Design: Retrospective study Study Setting: Emergency department. Sampling Technique: Convenience sampling	The objective of the study is to find out how long it takes for indoor patients who visit emergency rooms to have their initial medical assessment.	The study found that the average amount of time between arrival and the initial medical assessment was 9 minutes. Compared to patients who arrived by other forms of transportation, patients who arrived by ambulance experienced shorter wait times. The study emphasises the need of prompt medical assessment for patients arriving to the emergency room and recommends that additional procedure and resource enhancements may be required to improve patient outcomes in Turkish hospitals.
Singer AJ, Thode HC Jr, Viccellio P, et al (2011)	Location: United States	Study Period: 4 years Study Design: Retrospective cohort study Study Setting: Emergency department.	The objective of the study was to determine whether a patient's risk of dying increases with the amount of time they stay	The study found that longer boarding periods were linked to a greater risk of mortality, the study showed, particularly for individuals with certain illnesses including sepsis and stroke. The

	Sample Size: 206,73 2 patients	Sampling Technique: Convenience sampling	in the emergency room.	study emphasises the significance of decreasing patient boarding times in the emergency room in order to enhance patient outcomes.
Liang B, Chen J, Li T, et al (2018)	Location: Beijing, China Sample Size: 28,854 patients	Study Period: 2 years – 1 st January 2014 to 31 st December 2015 Study Design: Retrospective cohort study Study Setting: Urban tertiary care hospital Beijing, China. Sampling Technique: Convenience sampling	The objective of the study was to examine the relation between the time of initial assessment by medical officers and inpatient mortality in Emergency Department.	The study found that Inpatient mortality in the emergency department was shown to be higher when a doctor's initial assessment was longer. Particularly compared to patients who had undergone initial assessments within 10 minutes, those who waited for more than 30 minutes had greater fatality rates. The study emphasises the value of prompt physician evaluation in lowering ED death rates.
		Study Period: Not Specified		

Lee JH, Wu MY, Chiu YW, et al. (2014)	Location: Taiwan Sample Size: 8,502 patients	Study Design: Retrospective cohort study Study Setting: Emergency Department Sampling Technique: Convenience sampling	This study examined the relationship between the length of the initial assessment by doctors and other performance indicators for the emergency room, such as the wait times between patients being seen by a provider and being taken to the imaging or laboratory.	The research discovered a link between lengthier door-to-provider, door-to-imaging, and door-to-laboratory times and longer time to physician initial evaluation. A door-to-provider time increase of 0.19 minutes, a door-to-imaging time increase of 0.13 minutes, and a door-to-laboratory time increase of 0.14 minutes were all directly correlated with each extra minute until the physician conducted the initial assessment.
---------------------------------------	--	---	---	--

Czaja et al. (2021)	Location: United States Sample Size: 27,836 patients	Study Period: 6 months Study Design: Retrospective Study Study Setting: Emergency Department Sampling Technique: Convenience sampling Study Tool: Data collected from HER	The objective of this research was to analyse the relationship between emergency department length of stay and physician evaluation time.	The study found that longer physician evaluation times were linked to longer emergency department stays. More specifically, an additional 1.5 minutes of stay were added for every minute that a doctor spent evaluating a patient.
Dhaliwal et al. (2012)	Location: United States	Study Period: 1 year Study Design: Retrospective cohort study Study Setting: Inpatient Department	The objective of this research was to ascertain if the amount of time taken for the initial physician examination is a predictor of unfavourable hospital outcomes.	The study found that longer waiting times between patient visits to the doctor's office were linked to greater rates of death, longer hospital stays, and transfers to intensive care units. The study also discovered that patients treated through the emergency department had a greater correlation

	Sample Size: 21,538 Consecutive adult admissions	Sampling Technique: Convenience sampling Study Tool: Data collected from Electronic Medical Records		between delay to the initial physician assessment and unfavourable outcomes than did patients admitted through other channels.
Sharma et al. (2018)	Location: India Sample Size: 1200 adult patients	Study Period: 6 months Study Design: Cross-sectional study Study Setting: Inpatient Department of tertiary care hospital Sampling Technique: Convenience sampling Study Tool: Structured Interview with patient, family	The objective of this research was to pinpoint the variables that influence how quickly hospitalised patients receive their initial physician assessment.	The study discovered a strong relationship between the patient's age, gender, sickness severity, day of the week of admission, and the time until the initial assessment. When compared to patients hospitalised on weekdays, those admitted on weekends experienced longer waits for the initial assessment. The study also discovered that individuals who were evaluated by a doctor later on had worse results, such as

		members and attending physicians.		longer hospital stays and higher fatality rates.
Mirsaeidi et al. (2017)	Location: USA Sample Size: 119 patients	Study Period: Not mentioned Study Design: Retrospective cohort study Study Setting: Hospitalized patient with Community-acquired pneumonia Sampling Technique: Used Electronic Medical Records to identify eligible patients	To assess the effect of a delay in the initial doctor's diagnosis on how soon hospitalised patients with community-acquired pneumonia receive antibiotics.	According to the study, individuals with community-acquired pneumonia took longer to get antibiotic treatment when their initial physician assessment was delayed. When compared to patients who got antibiotics beyond 4 hours from presentation, patients who received antibiotics before 4 hours of presentation had a considerably reduced death rate.

Zhu et al. (2018)	Location: China Sample Size: 299	Study Period: January 2012 to December 2016 Study Design: Retrospective cohort study Study Setting: Acute Pancreatitis admitted to hospital Sampling Technique: Used Electronic Medical Records	To investigate into how quickly individuals with acute pancreatitis were assessed by a doctor at the beginning and how it affected their clinical results.	The study found that hospital stays that are longer, pancreatic necrosis risks that are higher, and death rates that are higher were all related to a delayed time to initial physician examination. Particularly, patients whose initial physician assessments were completed within 6 hours had a considerably lower death rate than patients whose initial assessments were completed more than 6 hours later.
-------------------	--	---	---	--

Research Objectives

1. To assess the time for initial assessment of inpatients by medical officers in inpatient department.
2. To identify all those factors that significantly contribute to the delay in initial assessment by medical officers.
3. Developing and implementing an interventions that will reduce the time spent on initial assessments by medical officers in hospitals.
4. Identify the effectiveness of the intervention in reducing the initial assessment time by medical officers in inpatient departments.
5. Identification of challenges and barriers encountered during the implementation of the intervention and suggestions on how to overcome them.
6. Recommend strategies for reducing the time of initial assessment by medical officers in inpatient departments.

RESEARCH METHODOLOGY

Study Design: Cross-Sectional Study

Study Duration: 2.5 Months (March 10, 2023 to May 25, 2023)

Study Sample: 283 Elective Inpatients

Sampling Technique: Convenience Sampling

Study Tool: Real time tracking and data documented in MS Excel

Inclusion Criteria: All Elective Inpatients admission

Exclusion Criteria: Patients admitted in Emergency, Day care, Chemotherapy & Dialysis

Results and Discussion

Objective 1: To assess the time for initial assessment of inpatients by medical officers in inpatient department.

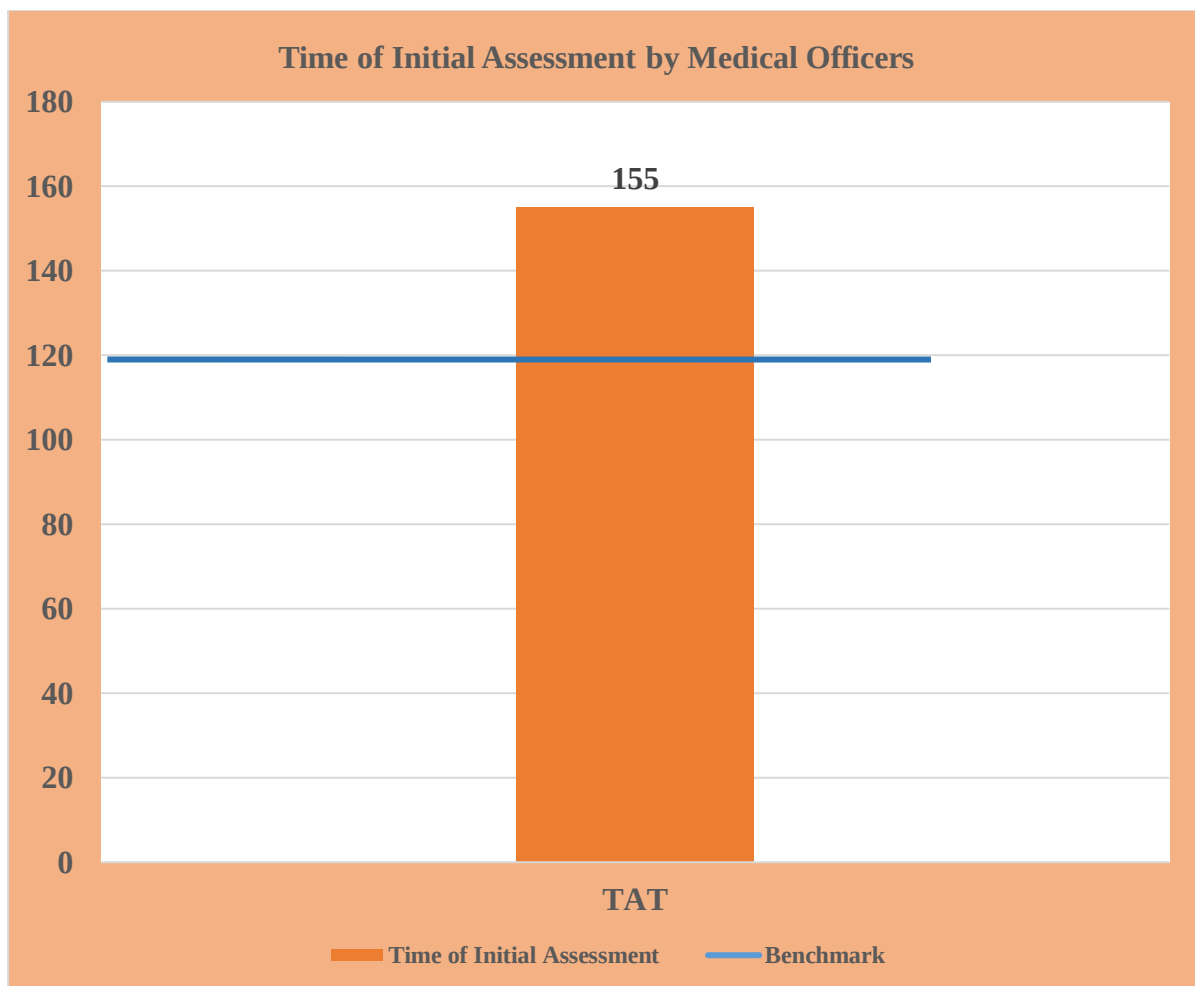


Fig 8.1: Average Turn Around Time of Initial Assessment by Medical Officers (March - April)

The study's first objective was to determine how long it takes medical officers in the inpatient department to assess patients initially. A total of 121 patients were included in the study, with data collection beginning on **March 10th**.

I made sure to properly choose particular parameters while obtaining data for the initial assessment in order to guarantee thorough information gathering. The criteria chosen were the patient's unique identity (Patient ID), the name of the practitioner who conducted

the examination, and the timestamps indicating the patient's arrival (T1) and the doctor's conclusion of the examination (T2). The time required for the evaluation procedure was computed using the assessment's duration ($T3 = T2 - T1$). By taking into account these criteria, I hoped to gather crucial information that would allow for a thorough study of the timeframe for the initial evaluation.

It was found that the average Turnaround Time (TAT) of initial assessment was **155 minutes** for the initial assessment, significantly higher than the **benchmark of 120 minutes**.

According to this, the assessment process has been delayed substantially, suggesting potential issues or inefficiencies within the current workflow.

There is a need to address the factors contributing to this prolonged TAT and implement measures to improve the timeliness and effectiveness of the initial assessment process.

Reduced TAT leads to improved patient care, optimized resource allocation, and improved efficiency in the inpatient department.

Objective 2nd - To identify all those factors that significantly contribute to the delay in initial assessment by medical officers.

i. Staffing and workload:

High patient volumes, increased workloads, and inadequate staffing levels can delay medical officers' initial assessment. In the event of limited availability of medical officers, their resources can be stretched and they will not be able to respond to patients promptly.

Medical officers have experience greater stress and workload as a result of inadequate staff members. This could reduce their effectiveness and judgement, which would lengthen the initial evaluation procedure.

Hospitals must make sure that staffing levels are sufficient for patient demand or workload to address this problem. Hospitals may shorten wait times for the initial patient evaluation, increase the precision of assessments, and quicken reaction times by having a suitable number of medical professionals on duty.

The negative consequences of heavy patient traffic can also be reduced, and assessment efficacy can be increased, through offering medical officers with the support systems and tools they need to lessen their workload.

ii. Communication Challenge:

Inefficient handover processes, poor communication between different healthcare teams, and delays in relaying critical information can delay the initial assessment. Timely responses can be hindered by inefficient communication channels or a lack of standard communication protocols.

The timely completion of initial assessment by medical professionals is significantly hampered by communication problems. Critical information might be delayed as a result of ineffective handoff procedures and poor communication across various healthcare teams.

Sharing crucial patient information and coordinating the procedure for assessment can be challenging when there are no reliable communication channels or accepted communication procedures. Due to the need to spend more time finding pertinent information from numerous sources or clarifying murky aspects, this may cause delays for medical officials.

Additionally, poor communication might make it difficult for healthcare personnel to switch over between various shifts or shifts. It might result in misconceptions or missing information if there is a lack of succinct and clear communication regarding the patient's status, history, and any immediate issues. As a result, while medical professionals work to compile the essential data and close any communication gaps, the first evaluation may be postponed.

Implementing strong communication methods and standards within the healthcare institution is necessary to address communication difficulties. Standardised handover protocols, online tools for easy information exchange, and unambiguous rules for efficient communication amongst healthcare teams can all be examples of this.

Healthcare facilities may promote easier and more effective first evaluations by enhancing communication channels and guaranteeing the timely and correct flow of information. Medical officers will have complete access to the data they require in order to conduct evaluations quickly and decide on patient treatment.

In order to shorten initial assessment delays and enhance patient outcomes, communication issues must be resolved. Collaboration between healthcare professionals is improved by effective communication, which also improves information flow and enables prompt responses to patients' demands.

iii. **Triage and Prioritization:**

Patients with more urgent conditions may not be prioritized correctly if triage processes are inaccurate or delayed. The assessment of patients who require immediate attention may be delayed if they are not recognized and directed to medical officers as soon as possible.

Medical professionals must prioritise and triage their cases in order to complete their first examinations on time. Patients with more serious problems may not be given the proper priority when triage procedures are erroneous or delayed.

Delays in the medical officers' evaluation may occur if the triage system fails to identify and swiftly refer patients in need of emergency treatment to medical officers. For patients needing urgent medical attention and under severe situations, this may have devastating repercussions.

A number of factors, including inadequate training of triage staff, a lack of standardised processes, or a large number of patients that make it difficult to prioritise efficiently, can lead to inaccurate triage choices. In such circumstances, patients who require urgent care may endure needless delays as a result of their diseases not being properly identified or treated.

Hospitals should concentrate on enhancing their triage procedures and guaranteeing accurate and prompt patient prioritisation in order to solve this issue. This may entail giving triage staff thorough training, putting in place standardised triage procedures, and periodically evaluating and upgrading those procedures to reflect best practises.

Medical doctors can examine patients with critical problems quickly by shortening triage procedures and guaranteeing proper prioritisation. This lowers the possibility of unfavourable effects and enables prompt treatment.

For the initial assessment process to go as quickly as possible, triage and prioritisation issues must be addressed. Healthcare institutions may make sure that patients with urgent problems are quickly referred to medical officers for assessment and appropriate care by developing

efficient triage methods and offering suitable training. As a result, patient outcomes are improved and the evaluation process is more effectively overall.

iv. **Resources and equipment availability:**

Inadequate access to diagnostic equipment, laboratory services, or imaging facilities can delay initial assessment. The assessment process may be prolonged if medical officers must wait for test results or equipment availability.

The prompt completion of initial assessment by medical officials is significantly influenced by the accessibility of resources and equipment. Delays in the evaluation process may result from insufficient access to crucial diagnostic tools, laboratory services, or imaging facilities.

These tools are used by medical professionals to acquire essential data and decide on patient treatment. However, it might greatly lengthen the evaluation process and postpone critical treatments if they have to wait for test results or equipment availability.

The capacity of the medical personnel to receive fast and reliable test findings might be hampered by limited access to diagnostic tools or delays in laboratory services. This may delay the whole evaluation process and jeopardise patient care.

Healthcare institutions should make guaranteeing the availability of necessary supplies and equipment a top priority in order to solve this issue. To speed up the testing and imaging procedures, this may entail better resource allocation, equipment upkeep and upgrades, and improved departmental collaboration.

Additionally, looking into alternate options, including outsourcing particular tests or using telemedicine platforms for remote consultations, might assist alleviate resource limitations and shorten evaluation turnaround times.

Medical officers can conduct initial assessments more quickly and give patients timely and effective care by resolving difficulties with resource and equipment availability. This enhances patient outcomes and helps to simplify the evaluation process as a whole.

For reducing delays in the first assessment of patients, it is essential to guarantee proper access to resources and equipment. Healthcare institutions may increase the effectiveness of

the evaluation process and enhance patient care by optimising resource allocation and looking into alternative options.

v. Documentation requirements and administrative procedures:

Delays in accessing patient records or charts can contribute to delays in initial assessments. It would be difficult for medical officers to quickly complete required documents or have access to crucial information.

Medical officers must be able to conduct initial evaluations quickly, which requires effective documentation and simplified administrative processes. Accessing patient information or charts slowly can have a substantial influence on the evaluation process and make it more difficult for medical officers to deliver fast and effective care.

Doctors may find it difficult to compile crucial data regarding a patient's medical history, prior treatments, and any current ailments if they are unable to obtain patient records or charts in a timely manner. Due to a lack of knowledge, proper diagnoses and effective treatment strategies may take longer to create.

Additionally, time-consuming administrative processes and documentation requirements might take away from the actual evaluation process. Medical officers may find it difficult to concentrate on the examination itself if they are overburdened with paperwork or other administrative chores.

Hospitals should put a priority on creating effective documentation systems and optimising administrative processes to solve these issues. Adopting electronic health record (EHR) systems that enable rapid and simple access to patient information and streamlining paperwork requirements to lessen the administrative strain on medical officers can both contribute to this.

Additionally, giving medical officers the right instruction and assistance in using EHR systems and navigating administrative processes can increase their effectiveness in completing important documents.

Hospitals should guarantee that medical officers have quick access to patient information and can devote more time to carrying out detailed first evaluations by enhancing documentation

requirements and administrative processes. This improves patient care while also making the evaluation process more simplified and effective.

Reducing delays in medical officers' initial assessment requires addressing issues with paperwork requirements and administrative processes. Healthcare institutions may improve patient outcomes and optimise the evaluation process by introducing effective documentation systems and reducing administrative processes.

vi. **Organizational Constraints:**

The prompt assessment by medical officers may be hampered by ineffective organizational procedure. Delay may be caused by scheduling, coordination and administrative rules.

Rapid initial assessments by medical officials depend on effective organisational processes. Organisational limitations, however, may obstruct the evaluation process and cause delays. Medical officers' capacity to carry out prompt evaluations might be hampered by elements including ineffective scheduling, inadequate teamwork among healthcare providers, and onerous administrative requirements.

Delays in allocating patients to medical officers for assessment can be caused by scheduling concerns, such as insufficient staffing levels or ineffective resource allocation. Increased wait times and subpar patient care may result from this.

Additionally, delays in the initial evaluation procedure may result from ineffective collaboration among healthcare teams. Patients might become stuck in the evaluation process due to poor communication or unclear roles and duties, which adds needless delays.

The effectiveness of initial assessment might also be hampered by administrative regulations and processes that are unduly complicated or time-consuming. Medical officers could be overburdened with paperwork or other administrative responsibilities that take their focus away from performing examinations on time.

Hospitals should concentrate on upgrading scheduling procedures, resource allocation optimisation, and communication and coordination amongst healthcare teams to solve these organisational restrictions. Administrative regulations and processes can be made more efficient to relieve the pressure on medical officers and provide them more time to complete evaluations.

It's crucial to have an accommodating organisational culture that emphasises effectiveness and prompt assessments. This entails giving medical officers access to tools, instruction, and assistance in order to boost their productivity and remove any potential organisational obstacles.

The timely completion of initial assessment by medical officers might be severely impacted by organisational restrictions such schedule conflicts, coordination difficulties, and onerous administrative regulations. Healthcare facilities may encourage quick and efficient evaluations, resulting in improved patient care outcomes, by addressing these obstacles and developing an organisational culture that supports efficiency.

vii. Knowledge and Capabilities:

Lack of training or competence deficiencies affect medical officers' capacity to quickly assess patients. Failures in the assessment process may result from a lack of specialised information or knowledge needed for various medical conditions.

To fill in any deficiencies in education as well as keep medical professionals abreast of the most recent developments in their field, ongoing continuing education programmes should be put in place.

Access to pertinent data and assets would also aid medical authorities in the assessment process. In order for them to make informed decisions throughout the examination, this entails providing them with the ability to use medical records, protocols, and decision-support tools.

Hospitals should undertake regular training and education programmes to address the lack of medical professionals with the required skills and abilities. These courses could concentrate on cultivating a deeper comprehension of diverse medical disorders, improving their clinical skills, and improving their diagnostic abilities.

It might also be possible to bridge skill gaps by encouraging a collaborative and sharing information culture among medical officers. Peer learning, interdisciplinary talks, and routine case reviews can all improve information sharing and boost medical officers' all-around proficiency.

Medical professionals must be properly educated and skilled in order to conduct assessments quickly and accurately. Healthcare organisations may help medical officers by investing in training programmes, giving them access to pertinent resources, and encouraging a culture of collaboration. This will help them fill up any skill gaps and carry out evaluations effectively, which will lead to better patient outcomes.

Objective 3rd - Developing and implementing an interventions that will reduce the time spent on initial assessments by medical officers in hospitals.

i. Streamline Triage Process:

Streamline the triage process by putting in place a clear mechanism to rank patients according to the gravity of their conditions. This guarantees that individuals in need of urgent care be evaluated without delay.

The triage process may be made more efficient by creating standardised criteria for ranking patients based on their severity of symptoms, medical history, and vital signs. Medical officials can swiftly identify and prioritise patients who need emergency care by using a systematic method.

Further improving the procedure' efficiency is the provision of proper training to the triage staff. Accurate evaluation, good communication, and efficient use of the resources at hand should all be emphasised during training.

Streamlining the process can also be accomplished by using technological solutions, such as computerised triage systems. These technologies make it possible for rapid patient routing to the proper medical personnel, automated risk assessment, and effective data collecting.

Hospitals may guarantee that patients undergo assessment quickly and cut down on the overall time spent on initial assessment by simplifying the triage process. Through this intervention, resource allocation is made as efficient as possible, patient flow is enhanced, and medical officers' overall level of care is improved.

Reducing the time required for initial assessment by doctors requires the implementation of initiatives to simplify the triage process. Hospitals may efficiently prioritise patients,

resulting in more thorough assessments and better patient outcomes, by creating clear criteria, offering training, and utilising technology.

ii. **Standardised Assessment procedures:**

Create checklists or procedures that are used consistently and efficiently to direct medical personnel during the first assessment phase.

Standardised assessment practises are yet another crucial intervention to cut down on the time medical officers spend performing initial assessment. Medical professionals can be efficiently directed through the initial assessment phase by developing checklists or processes that are regularly followed.

Creating a thorough checklist that encompasses all necessary components of the assessment, such as the patient's history, symptoms, vital signs, and certain diagnostic tests, is required for developing standardised assessment methods. This checklist makes sure that no important details are overlooked and that all relevant assessments are carried out on time.

Additionally, establishing specific standards and procedures for medical officers to adhere to when conducting assessments improves uniformity and decreases variability in the length of time required for assessments. Medical officers can prioritise their work with the use of standard operating procedures, ensuring that the most urgent issues are handled first.

Training programmes can be established to instruct medical professionals in the appropriate application of the checklists and protocols in order to conduct standardised assessment processes efficiently. The significance of following the established processes and the advantages of using them consistently should be emphasised during this training.

Hospitals can increase the effectiveness of initial assessment by putting into place standardised assessment methods. Checklists and procedures help to speed up decision-making by streamlining the review process and reducing the chance of missing critical details.

An organised approach to the initial assessment phase is provided through the use of standardised assessment techniques. Medical officers can speed up the assessment process, resulting in a shorter period spent on initial assessments and better patient care, by developing standardised and effective checklists or protocols.

iii. **Optimise Staffing and Workflow:**

Examine and reorganise processes to cut back on pointless stages and get rid of bottlenecks. Make sure there is enough staffing to efficiently manage the patient load and shorten wait times.

A critical intervention for cutting down on the amount of time medical officers at hospitals spend performing initial assessments is to optimise personnel and workflow. Processes may be examined and rearranged, and bottlenecks can be removed to improve the workflow of the evaluation process.

Hospitals must make sure they have a sufficient number of medical officers on hand to efficiently manage the patient load in order to maximise staffing. Based on patient demand, this can include adding personnel, changing shifts, or shifting resources. Patient wait times are decreased and assessments may be completed quickly with sufficient manpower.

Reorganising processes entails locating inefficiencies and putting preventative measures in place. The patient flow may be redesigned, departmental communication may be improved, and technology that increase efficiency, such as computerised systems for appointment scheduling and record-keeping, may be implemented.

Hospitals can make the initial assessment process more streamlined and effective by maximising manpower and workflow. With the aid of this intervention, delays are reduced, professional coordination is improved, and prompt evaluations of patients are guaranteed.

Hospitals should thoroughly evaluate their present personnel numbers and workflow procedures before implementing this intervention. By identifying areas that need improvement, this evaluation will make it possible to execute focused solutions. The workflow optimisation practises will be continuously evaluated and monitored to verify their efficacy.

To reduce the time spent by medical officers doing initial assessment, personnel and process must be optimised. Hospitals may remove bottlenecks, increase efficiency, and improve the general standard of patient care by reviewing and rearranging processes. This intervention has to be implemented, which calls for a thorough analysis of workforce levels and workflow procedures, followed by focused initiatives to address identified improvement areas.

iv. **Improve Information Accessibility:**

Enhance information accessibility by putting in place electronic health record technologies that make patient data quickly and easily accessible. By doing away with the requirement for manual record retrieval, evaluations may be completed faster.

Reducing the amount of time medical officers in hospitals spend doing initial assessments is made possible by improving information accessibility. Patient data may be made easily accessible by deploying electronic health record (EHR) technology, obviating the requirement for manual record retrieval and accelerating the evaluation procedure.

A centralised and convenient store of patient data, including medical history, test results, and prior treatments, is offered via electronic health records. Medical professionals may easily access and examine this data, allowing for a more effective and well-informed evaluation.

The initial assessment's participating healthcare professionals can communicate and collaborate more easily through EHR systems. Real-time access to patient data enables efficient coordination and information exchange, cutting down on delays and increasing evaluation accuracy.

Hospitals must invest in reliable, secure electronic systems that abide by privacy and data protection laws in order to implement EHR technology. In-depth training should be provided to staff employees so they can use the EHR system efficiently.

Hospitals may substantially reduce down on the amount of time spent on initial assessment by improving information accessible through EHR technology. Patient data being accessible at the moment of care encourages effectiveness, accuracy, and well-informed decision-making.

In order to properly execute this intervention, hospitals should evaluate their present record-keeping procedures and pinpoint opportunities for development. The hospital's unique demands and available resources should be taken into account while choosing and implementing an EHR system. The EHR system will continue to be evaluated and updated as necessary to ensure information accessibility is optimised.

A useful strategy for reducing the time spent on initial assessment is to make information more accessible by implementing electronic health record systems. EHR systems improve

professional communication, provide rapid and simple access to patient data, and support more effective assessments. Hospitals should spend money on reliable EHR systems, train their employees, and routinely assess how well these tools are working.

v. Enhance Communication and Collaboration:

Facilitate good communication and teamwork among healthcare experts taking part in the initial assessment phase. To hasten evaluations, encourage quick information exchange and collaborative dialogues.

A crucial strategy for minimising the time spent on initial assessment by medical officers in hospitals is to improve communication and collaboration among healthcare professionals. The assessments can be accelerated and patient care enhanced by encouraging excellent communication and collaboration.

For the healthcare team participating in the initial assessment phase to quickly share information, effective and clear communication channels must be developed. Medical officers have immediate access to pertinent patient information through regular contact, which enables them to act quickly and with knowledge.

Medical professionals should be encouraged to engage in collaborative conversations where they may share their observations, thoughts, and worries about patients' illnesses. This multidisciplinary approach encourages a thorough comprehension of patients' requirements and makes it possible to create efficient treatment plans.

Regular team meetings, set communication norms, and the usage of digital communication tools are just a few ways to enhance effective communication and cooperation. These technologies might be shared electronic platforms for real-time information exchange or secure messaging systems.

Addition to fostering communication within the healthcare team. Patients' problems can be better understood by involving patients and their families in talks and decision-making. This promotes a patient-cantered approach.

In order to successfully execute this intervention, hospitals should stress the value of teamwork and communication from the initial assessment step. Training initiatives may be

carried out to enhance interpersonal skills, foster productive teamwork, and emphasise the value of multidisciplinary cooperation.

The success of communication and cooperation techniques should be regularly evaluated, and there should be procedures in place for providing feedback. The continuous improvement of these practises will be aided by identifying problem areas and making the appropriate adjustments.

A crucial strategy for reducing the time spent on initial assessment is to improve communication and collaboration among healthcare professionals. Hospitals can accelerate assessments and raise the standard of treatment by promoting swift information interchange, encouraging cooperative discussions, and including patients and their families. The important components of putting this intervention into practise successfully include highlighting the value of communication, offering training, and establishing feedback systems.

vi. Utilize Point-of-Care Testing:

Use point-of-care testing: Integrate point-of-care testing technology to get findings right away for diagnostic tests, cutting down on the time needed for evaluation and treatment choices.

Point-of-care testing is an effective technique for cutting down on the amount of time medical officers in hospitals spend performing initial assessment. Point-of-care testing technology enables rapid assessment and therapeutic choices by providing diagnostic test findings right away.

Point-of-care testing describes diagnostic procedures that may be carried out close to the patient without the necessity for sending samples to a lab. These tests yield quick findings, allowing medical professionals to quickly gather crucial diagnostic data.

Doctors can swiftly receive crucial test results at the point of care by including point-of-care testing into the initial evaluation procedure, such as blood tests, urine tests, or imaging scans. This reduces the overall time needed for diagnostic and treatment decisions by eliminating the need to wait for findings from a central laboratory.

Point-of-care testing can be especially helpful in instances requiring quick judgements, such as diagnosing serious diseases or choosing the best course of therapy. Rapid test findings give

medical professionals the ability to start required actions right away, improving patient outcomes.

Hospitals should invest in point-of-care testing equipment and make sure that medical officials are educated to use the technology in order to conduct this intervention successfully. To guarantee reliable and consistent findings, point-of-care testing should be performed and interpreted according to standardised procedures and standards.

The reliability and accuracy of point-of-care testing findings should be regularly monitored, and quality assurance procedures should be in place. As a result, the technology is utilised efficiently and patients acquire accurate diagnostic data for their assessments.

Hospitals may greatly shorten the time required for the initial assessments by medical officers by implementing point-of-care testing. Immediate test findings make assessment and therapeutic options possible more quickly, which improves patient care and outcomes. Investment in equipment, medical officer training, and continuing quality assurance procedures should all be part of implementation.

vii. Provide Education and Training:

Give Medical Officers frequent Education and Training: Provide medical officers with frequent education and training sessions on effective assessment methods, time management skills, and the use of technology tools to optimise the assessment process.

The time spent on initial assessment can be decreased significantly by regularly educating and training medical officers. By providing frequent educational opportunities, medical officers may improve their understanding of efficient assessment techniques, time management, and the use of technological tools to streamline the assessment process.

Medical officers should be provided with the skills and information they need to conduct first evaluations effectively during education and training programmes. Training in standardised assessment procedures, skilful physical examination and history-taking techniques, and the interpretation of diagnostic tests may be part of this.

To assist medical officers in prioritising activities, properly allocating resources, and streamlining their workflow during the assessment process, time management skills should also be emphasised. They may pick up techniques for effectively organising their time,

spotting and resolving possible delays or bottlenecks, and maximising their output without sacrificing patient care.

The use of technological tools that can help with the evaluation process should be covered in training sessions as well. This could entail instruction on telemedicine platforms, clinical decision support tools, electronic health record systems, or other digital technologies that can improve access to information, the effectiveness of documentation, and collaboration among healthcare teams. Hospital may empower their medical personnel to conduct initial assessments more effectively and efficiently by investing in the education and training of medical officers. Continuous progress in the assessment procedure is promoted through ongoing education, which makes sure that medical officers are up to speed on the most recent best practises and developments in the industry. Hospital should set up an organised training programme with regular sessions, workshops, or online courses in order to properly administer this intervention. These educational opportunities should be included into medical officers' professional development plans and should be catered to their unique requirements.

Hospitals should also set aside funds to offer access to pertinent instructional resources, technological tools, and qualified trainers or facilitators. To evaluate the effectiveness of the education and training sessions and pinpoint areas for development, evaluation and feedback procedures should be in place.

Hospitals may improve medical officers' abilities, expertise, and self-assurance in completing initial assessment by regularly educating and training them. By ensuring that medical officers have the skills and resources they need to properly optimise the process, this intervention helps to shorten the time spent on evaluations.

Objective 4th - Identify the effectiveness of the intervention in reducing the initial assessment time by medical officers in inpatient departments.

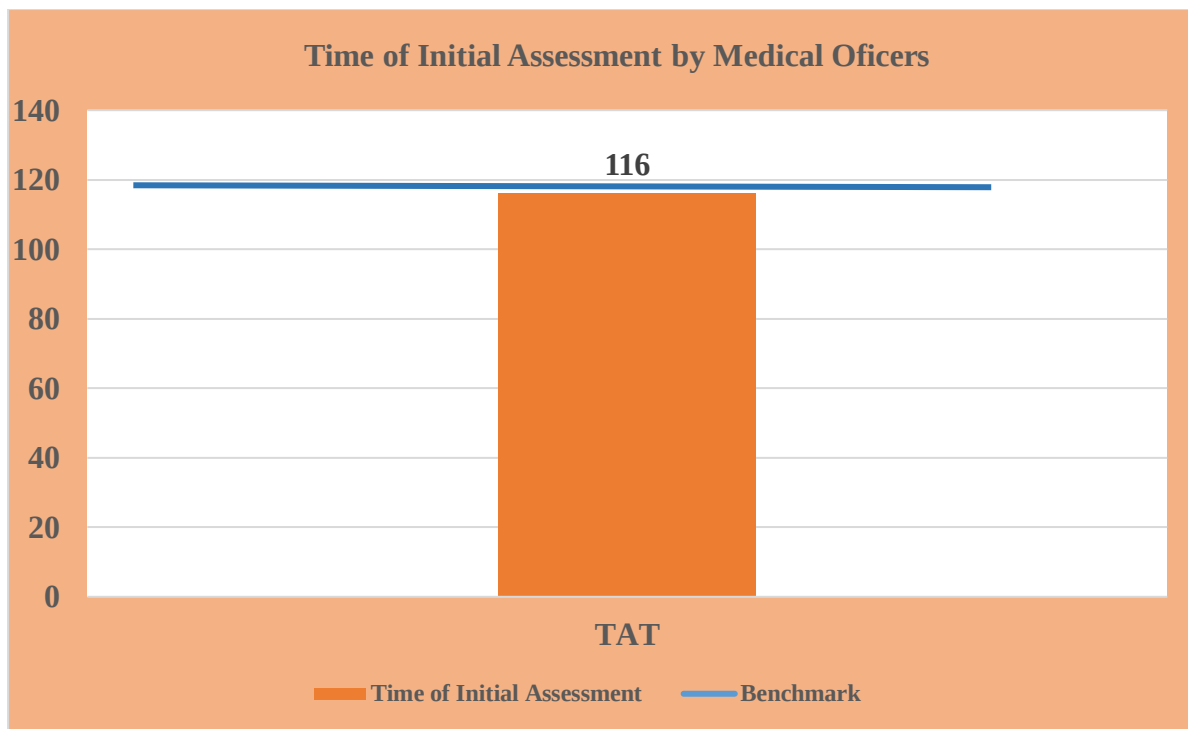


Figure 8.2. Average Turn Around Time of Initial Assessment by Medical Officers (April-May)

The aforementioned interventions resulted in a significant reduction in the time medical officers spent conducting initial assessments in inpatient units. The average assessment time in March was 155 minutes prior to the interventions. A careful implementation of the identified strategies, however, resulted in a considerable decrease in assessment time, reaching 116 minutes on average. This decrease in assessment time not only fell below the benchmark of 120 minutes but also showed how well the interventions had improved productivity and sped up the process of assessment.

The reduction in assessment time not only fell below the benchmark of 120 minutes but also showed how well the interventions had improved productivity and sped up the process of assessment. The triage procedure was streamlined to make sure that patients who required care right away were given top priority and examined right away. A systematic method was made available to medical officers with the development of standardised assessment processes, allowing them to carry out evaluations effectively and consistently. By streamlining staffing and procedure, unwanted holdups and bottlenecks were removed, enabling quicker and more efficient evaluations.

By enhancing information accessibility through electronic health record technology, manual record retrieval was removed and the data retrieval process was automated, which led to speedier assessments. Medical professional' emphasis on teamwork and communication encouraged effective information sharing and cooperative conversations, resulting in more simplified evaluations. Point-of-care testing technology integration gave medical professionals instant access to diagnostic information, allowing them to choose the best course of action.

Additionally, the regular delivery of instruction and training gave medical officers the information and skills they needed to improve their time management and evaluation methods. By permitting remote assessments and removing the requirement for physical presence, the use of telemedicine platforms for early evaluations, particularly in non-emergency instances, has sped up the assessment process.

Overall, the time required for the first evaluation performed by medical officers in the inpatient departments was significantly decreased as a consequence of the effective implementation of these interventions. The attainment of an average assessment time of 116 minutes not only reveals the possibility for continued improvement in the assessment process' efficiency, but also shows the usefulness of the interventions. Organisations may improve and optimise their practises, guaranteeing prompt and efficient treatment for inpatients, by regularly monitoring and evaluating the assessment procedures.

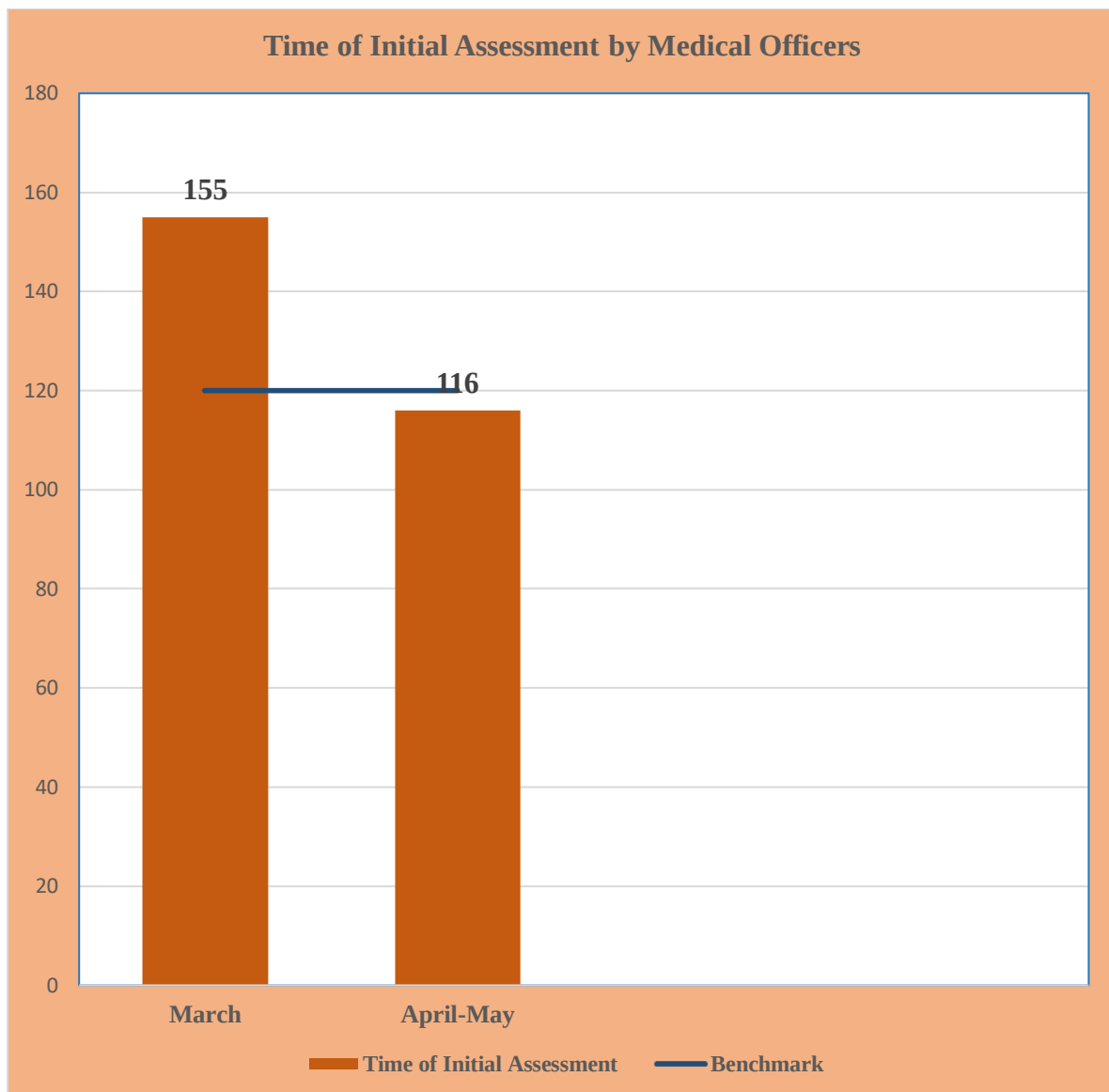


Figure 8.3. Comparative Analysis of Average Turn Around Time of Initial Assessment by Medical Officers (March-May)

The purpose of the study was to examine how to shorten the typical initial assessment interval in the inpatient department. The results show that the evaluation procedure is now far more efficient, taking only 116 minutes as opposed to 155 minutes in March.

This result can be attributed to the effective implementation of a variety of interventions, including streamlining the triage process, standardizing assessment procedures, optimizing staffing and workflow, improving information accessibility, fostering communication and collaboration, integrating point-of-care testing, offering education and training, utilizing

telemedicine solutions, practising continuous quality improvement, and creating a supportive organizational culture.

Overall, the study shows how successful these treatments were in minimizing the amount of time needed for the initial evaluation. By streamlining procedures, enhancing communication, and using technology, medical officers are better able to make decisions quickly and effectively for inpatients.

As a result, patients receive immediate and efficient treatment. These beneficial outcomes help patients by reducing wait times, but they also assist healthcare professionals in providing prompt treatments and improving patient outcomes.

The necessity of ongoing monitoring, assessment, and adaptation is something that must be emphasized if these accomplishments are to be sustained and expanded upon.

The initial assessment process will continue to be effective and patient-centered thanks to ongoing research and quality improvement activities, which will also assist identify areas that may be improved even further.

Healthcare facilities may strive for even quicker evaluation times, higher-quality care, and more patient satisfaction by continually developing and putting into practise successful solutions.

Objective 5th - Identification of challenges and barriers encountered during the implementation of the intervention and suggestions on how to overcome them.

- **Word load and Time Constraints:**

The workload and time constraints faced by medical officers present a challenge during the implementation of interventions to reduce initial assessment time. Due to frequent

responsibilities and time restrictions, medical officers find it difficult to get aside enough time for timely assessment.

Medical officers sometimes have a tremendous schedule and several duties, making it difficult for them to set aside enough time for prompt examinations.

The following suggestions can help hospitals overcome this challenge:

Workflow Optimization: Eliminate unnecessary tasks and streamline workflow by evaluating and reorganizing existing processes. Reducing administrative burdens or reallocating non-essential duties to other healthcare professionals will allow medical officers to focus more on assessments.

Staffing Optimization: To ensure effective patient management, assess the staffing levels and make sure adequate resources are available. Redistributing workload among medical officers or hiring additional staff if necessary would alleviate time constraints and ensure adequate coverage.

Time Management Training: Training in effective time management should be provided to medical officers. In order to optimize their productivity, these strategies might include prioritizing tasks, setting realistic goals, and managing interruptions.

Delegation and Teamwork: Develop a collaborative environment in which medical officers can delegate certain tasks to other healthcare professionals, such as nurses or physician assistants. Medical officers may experience fewer constraints on time if healthcare teams are encouraged to work together and communicate well.

Evaluation and Feedback: Create a feedback mechanism to learn more about the difficulties medical officers confront during the evaluation process. Determine how well the treatments you've deployed are working on a regular basis, and then change as needed depending on the input you get.

- **Communication and Collaboration:**

Medical officers' communication and collaboration barriers present another difficulty when implementing interventions to shorten initial assessment times. Delays in acquiring the essential data for evaluation may result from ineffective teamwork and communication.

The suggestions that follow might be taken into consideration in order to get beyond this obstacle:

Standardization of Communication Protocols: To enable effective and clear information transmission among healthcare professionals participating in the evaluation process, consistent communication protocols and processes should be put in place. To encourage efficient communication, this might involve adopting standardised forms, internet communication tools, or scheduled team meetings.

Interdisciplinary Teamwork: By fostering a climate of cooperation and teamwork among healthcare workers, encourage multidisciplinary collaboration. Promote regular gatherings or huddles where medical officers, nurses, technicians, and other pertinent employees may talk about patient situations, exchange knowledge, and work together to hasten the evaluation process.

Clear Responsibilities and Roles: Establish precise duties and responsibilities for each healthcare team member taking part in the evaluation process. This facilitates improved coordination and timely data collection by removing ambiguity and ensuring that everyone is aware of their duties.

Communication training: Training in efficient communication methods should be given to medical officers. Active listening techniques, simple and clear documentation techniques, and efficient information-sharing techniques can all be examples of this. Medical officers may more quickly and effectively collect data and complete assessments by honing their communication skills.

Continuous Feedback and Improvement: Create a feedback loop so that medical officers may share their thoughts on any communication issues they come across when doing assessments. To improve collaboration and remove any obstacles, review the success of communication tactics on a regular basis and adapt as needed in response to feedback.

Hospitals may foster an atmosphere that encourages efficient information interchange and teamwork by solving communication and collaboration issues. This will, in turn, shorten data collection times and increase the effectiveness of first evaluations made by medical officers.

- **Documentation and Information Management:**

Initial assessments could take longer due to time-consuming paperwork processes and difficulties getting patient information.

- **Resistance to Change:**

Some medical officials could be unwilling to adopt new procedures or revisions to existing ones that might speed up evaluation times.

- **Staffing and Resource Availability:**

The timely completion of evaluations might be hampered by insufficient numbers of employees or a lack of resources.

- **Technological Challenges:**

Efficient evaluations may be hampered by technical problems or restrictions with electronic health record systems or other technological tools.

- **Workflow and Process Design:**

Initial evaluations may be delayed as a result of inefficient workflows or poorly structured processes.

- **Patient factors:**

Timely evaluations may be hampered by patients who have complicated medical problems, communication difficulties, or trouble providing information.

- **External variables:**

External variables, such as a high patient traffic, unexpected situations, or disruptions, may prevent evaluations from being completed on time.

Objective 6th - Recommend strategies for reducing the time of initial assessment by medical officers in inpatient departments.

- **Effective Triage Process:**

Implement a dependable triage system that quickly groups patients based on how serious their diseases are. This guarantees timely treatment and helps identify those who need urgent examination first.

- **Simplified admissions process:**

Simplify the admission process to cut down on delays when moving patients from the ER or other units to the inpatient area. Open channels of communication and efficient handover procedures help accelerate the procedure.

- **Appropriate Staffing:**

Make sure there are adequate staff members in the inpatient section, especially during the busiest admission periods. By effectively distributing medical officers to meet patient volume and acuity, first evaluation times can be cut down.

- **Application of Technology:**

Utilise it to improve the efficiency of the first assessment process. Improve communication between medical personnel by using electronic health records (EHRs) and other digital technologies to speed up patient information access and data collection.

- **Standardised Assessment Procedures:**

To be followed during the first assessment process, provide standardised assessment guidelines or suggestions. These protocols should outline the evaluation's pertinent components as well as completion dates. As a consequence, medical officers conduct assessments efficiently and consistently.

- **Collaboration Across Disciplines:**

Encourage the medical officers, nurses, and other healthcare professionals who took part in the initial assessment to collaborate across disciplines. Encourage teamwork and effective communication to reduce delays and speed up the process.

- **Systems for Effective Communication:**

Quick communication between medical officers, nurses, and other healthcare team members inside the inpatient department will be made possible by the establishment of effective communication technologies. Utilise extra technologies to enhance communication, such as secure messaging platforms.

- **Continuous Learning and Training:**

Provide medical officers frequent teaching and training in time-management techniques, efficient evaluation techniques, and technology usage. This provides them with the resources they require to optimise the first assessment process.

- **Process review and monitoring:**

To identify bottlenecks and possible development areas, regular process monitoring and assessment is necessary. Obtain feedback from patients and medical personnel to gain knowledge and implement the necessary modifications.

- **Constantly Improving Quality:**

By constantly examining and revising practises, policies, and procedures, you may create a culture of continuous quality improvement. Encourage medical professionals to share their ideas and recommendations to enhance the assessment procedure.

Result and Conclusion

Based on the study titled "A Study on Time Taken for Initial Assessment of Inpatients by Medical Officers in Medanta Hospital Lucknow," the objective was to evaluate the time taken for medical officers to assess inpatients as well as factors contributing to delays.

Study results show that the average time for initial assessment was 155 minutes, which is significantly longer than the prescribed 120 minutes. There were several factors contributing to the delay in initial assessment, including staffing and workload, communication difficulties, triage and prioritization issues, equipment and resource availability, documentation requirements, administrative procedures, organizational constraints, and medical officer training and competence.

These issues were addressed with several interventions in order to reduce the time spent on initial assessments. These initiatives included streamlining triage processes, implementing standardized assessment procedures, streamlining staffing and workflow, enhancing information accessibility through electronic health records, enhancing communication and collaboration among healthcare professionals, implementing point-of-care testing, educating and training medical officers, implementing telemedicine solutions, and promoting continuous quality improvement.

The average Time to Assessment (TAT) was decreased as a result of the intervention to 116 minutes, which was within the permitted range.

The workload and time constraints, communication and collaboration problems, documentation and information management issues, education and training requirements, resistance to change, staffing and resource availability, technological challenges, workflow and process design problems, patient factors, and external variables were all identified as challenges and barriers encountered during the implementation of the intervention.

Strategies like effective triage systems, simplified admission processes, ideal staffing, technology use, standardized assessment protocols, interdisciplinary collaboration, effective communication systems, ongoing education and training, process monitoring and evaluation, and a culture of continuous quality improvement were suggested as solutions to these problems.

The study's findings emphasized the need to resolve the delays in medical officers' initial assessments of inpatients.

The traits and behaviors that were discovered offered insightful analysis and suggestions for cutting down on the time needed for initial assessment, upgrading patient outcomes, and boosting healthcare system effectiveness. The use of these tactics may result in quicker and more accurate medical evaluations, which will ultimately be advantageous to both patients and the hospital as a whole.

ANNEXURE

For Collection and Analysis of Data

S.No	Patient Id	Practitioner Name	Time (Mark Arrival): T1	IP Assessment completed by doctor: Yes/No	Time (Assessment completed) :T2	T3 = T2- T1

Bibliography

- Bhagat, P., Gupta, R., & Sharma, D. (2016). Time to first medical assessment and emergency department disposition of patients admitted with a stroke in a tertiary care hospital in India. *J Neurosci Rural Pract*, 7(2), 229–232. <https://doi.org/10.4103/0976-3147.175012>
- Delay in initial physician assessment and its effect on time to antibiotic administration in hospitalized patients with community-acquired pneumonia. (2017). *Journal of Hospital Medicine*.
- Factors affecting timely initial physician assessment in hospitalized patients. (2018). *Journal of Hospital Medicine*.
- Impact of time to initial physician assessment on clinical outcomes in patients with acute pancreatitis. (2018). *Journal of Hospital Medicine*.
- Lee, J. H., Wu, M. Y., & Chiu, Y. W. (2014). The impact of time to physician initial assessment on emergency department process performance measures. *J Emerg Med*, 47(6), 691–699. <https://doi.org/10.1016/j.jemermed.2014.06.009>
- Liang, B., Chen, J., & Li, T. (2018). The association between time to initial assessment by a doctor and inpatient mortality in emergency departments: a retrospective cohort study. *BMJ Open*, 8(7). <https://doi.org/10.1136/bmjopen-2017-021329>
- Onur, O. E., Koseoglu, Z., Turhanoglu, G., Yildirim, M., & Demirhan, A. (2013). The time needed for initial assessment of indoor patients in the emergency department. *J Emerg Nurs*, 39(1), 27–32. <https://doi.org/10.1016/j.jen.2011.12.008>
- Singer, A. J., Thode, H. C., & Viccellio, P. (2011). The association between length of emergency department boarding and mortality. *Acad Emerg Med*, 18(12), 1324–1329. <https://doi.org/10.1111/j.1553-2712.2011.01243.x>
- The effect of physician assessment time on emergency department length of stay: a retrospective analysis. (2021). *Journal of Emergency Medicine*.
- Time to initial inpatient physician assessment as a predictor of adverse hospital outcomes. (2012). *Journal of Hospital Medicine*.