Dissertation

At

Venkateshwara institute of medical science, (Uttar Pradesh)

“A descriptive study of TAT (turnaround time) for initial assessment in ICUs and Wards”

By

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PG/22/037

Under the Guidance of

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PGDM (Hospital & Health Management)
2022-24

International Institute of Health Management Research
New Delhi

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His performance during internship period was found to be satisfactory.

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The following dissertation titled "Observational study of TAT (Turnaround Time)" at "Venkateshwar Institute of Medical Sciences" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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Area of Dissertation: Venkateshwar institute of Medical sciences (Descriptive Study of initial assessment Turnaround Time in Wards and ICUs.

Attendance: Regular

Objectives achieved: Yes

Deliverables: Communication & leadership.

Strengths: Time management

Suggestions for Improvement: Analytical skills

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

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ABSTRACT

Initial Assessment(TAT) of Patients in ICUs & Wards

Background:

Compliance refers to the observance of legal, regulatory, and institutional directives. When it comes to INITIAL ASSESSMENT adherence to proper timing becomes much more important , as it gives the Treating doctor essential and required information about the patient's vitals ,which is very significant for planned future treatment of the patient.
Initial assessment is crucial to thoroughly check patients BP,. Oxygen ,body temperature and sugar levels etc. So that hospital staff have clear idea about patient's actual condition.

Methods:

A descriptive observational study was carried out for a period of around 3 months in ICU and Wards of Venkateshwar Institute of Medical Science, gajraula ,Amroha .
This study is observational and descriptive study after thorough observation of Timing of Initial assessment for patients in Icu and wards. Sample size of 50 taken for Icu and 190 taken for wards through convenience sampling method.

Results:

The initial assessment Turn Around Time (TAT) in both wards and ICUs must adhere to NABH standards, (given in second edition of 2009) which mandate a maximum of 60 minutes for wards and 30 minutes for ICUs.
A comprehensive analysis of the data from the hospital disclosed the following results:

In the ward setting, 73.68% of initial assessments were executed within the 60-minute threshold, whereas 26.32% surpassed this limit.

In the ICU context, 56% of initial assessments were accomplished within the 30-minute benchmark, while 26% exceeded this parameter.

ACKNOWLEDGEMENT

I wish to extend my profound gratitude to my mentors, Dr. Sharad Choudhary and Dr. Jaiswal, for providing me with the invaluable opportunity to undertake this project titled "A Project on Initial Assessment of Patients in Wards and ICUs." Their guidance and expertise have been pivotal throughout this journey, enabling me to delve deeply into the complexities of patient assessment. This experience has significantly honed my research skills, broadened my knowledge base, and enhanced my understanding of critical care practices in both wards and intensive care units.

Furthermore, I am deeply appreciative of the unwavering support and encouragement from my mentor, parents, and friends. Their continuous assistance and belief in my abilities were instrumental in the successful completion of this project. The collaborative effort and moral support from these individuals have been a cornerstone in overcoming challenges and achieving the objectives of my research.

Harshit Sharma

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ABBREVIATIONS

ICU- Intensive Care Unit

TAT-Turn Around Time

NABH-National Accreditation Board For Hospitals

CPRS-Client Patient Record System

ENT-Eyes, Nose, Throat

Introduction of venkateshwar institute of medical sciences

Venkateshwara Institute of Medical Sciences (VIMS) is a premier medical institute of India acknowledged as a center of excellence for education. Here you will find well-equipped classrooms, world-class laboratories, and technology-enabled learning. Super specialists engaged with the latest surgical equipment. VIMS has the advantage of 1200+ teaching beds that offers practical training to the students during their internship that makes complete digital and comprehensive learning. The institute is presently affiliated to the **Shri Venkateshwara University** and is recognized by the MCI for conducting. The secret of the success of any medical college or hospital lies in the quality of its faculty. Our team has eminent doctors with teaching experience and Nationalized with and administrative affairs.

Free medical services are given to poor and needy patients. Separate rural and urban health training centers have been established so as to impart field-practice training to medical students and helping the needy people nearby and those in remote areas. At present, the hospital has 1200+ general teaching beds with state of the art operation theatres. Besides, there are 20 intensive care beds with 24hrs with high-tech care facility, serving a wide cross-section of the community, belonging to every segment of society.

Venkateshwara Institute of Medical Sciences, Gajraula, Dist. Amroha, UP promoted by Shri Bankey Bihari Educational & Welfare Trust is serving the rural/poor/underprivileged population of the constituency under the aegis of SHRI VENKATESHWARA UNIVERSITY GAJRAULA, DISTT-AMROHA UTTAR PRADESH.

Shri Venkateshwara University is an autonomous body promulgated by the Govt. of Uttar Pradesh Act. No. 26 of 2010, passed by Uttar Pradesh Assembly. The University is further approved by the UGC u/s 2(f) of the UGC Act 1956, with the right to confer degree u/s 22(1) of the UGC Act.

Shri Venkateshwara University is promoted by **Shri Bankey Bihari Educational And Welfare Trus**t (SBBEWT). It is controlled by a Board of Management, constituted by SBBEWT, which is headed by the Chancellor Shri Sudhir Giri, a great visionary, educationist and nationalist, who translated his ideas and dreams of promoting higher education into reality by setting up Institutes of Higher Learning in various subjects, carving a niche as an educationist and aiding inculcation of values in the young generation. The Group, under an able leadership and with the active support and association of renowned academicians, experienced professionals and technocrats, has established a chain of following institutes of higher education and learning

Chairman's Message

Our level of care and attention to detail in everything we do at VIMS Hospital, Gajraula truly set us apart and make us the healthcare provider of choice for many patients. The institution's foundations are quality, medical and service excellence, and
attention.

Vision:

Venkateshwara Institute of Medical Sciences aspires to emerge as one of the foremost medical schools in the country and provide excellent educational, research, specialty and primary care opportunities in the region to become a leader in research discoveries and improve scientific knowledge; using it to improve patient care and incorporate it in practice towards prevention of diseases to be identified as an Institution known for integrity, ethical and professional conduct.

To provide evidence-based clinical care to the attending patients & public health services to the neighboring community and to undertake such research program which addresses the prevailing health problems and whose outcome can be translated to a functional service package & program benefiting individuals and the community at large.

Mission:

To produce knowledgeable, caring and competent students by imparting knowledge and skills that will encourage and enable practice of ethical and scientifically-based health care with a high level of Skill and Social Responsibility.

To create a teaching and learning environment to help students develop their own learning styles and ability to use academic resources while reflecting on their experience. The medical course is designed to develop and maintain lifelong patterns of appropriate professional behavior.

To synthesize and integrate knowledge gained from several disciplines into plausible explanations for clinically related problems or situations and develop effective wellness strategies through:

Data collection- both through patient history and physical examination.

Procedural and analytical skills.

Proper use of technology.

Arriving at an effective diagnostic plan.

Critical appraisal, interpretation, and application of scientific knowledge to clinical practice.

Practice learning as a lifelong commitment.

Empathy towards patients-given their biological, social and psychological needs, their families and the society at large.

Develop a deep sense of responsibility toward professional life while pursuing and achieving excellence.

SPECIALITIES OF THE VENKATESHWAR INSTITUTE OF MEDICAL SCIENCES

- General medicine
- Paediatrics
- General surgery
- Ophthalmology
- Orthopaedics
- Oto-Rhino-Laryngology
- Psychiatry
- Dermatology
- Leprosy
- Tuberculosis
- Respiratory disease
- Dentistry
- Radio-diagnosis
- Anaesthesiology
- Community medicine
- Cardiac sciences
- General physician
- Neurology
- Child development and Behavioural sciences

INTRODUCTION OF PROJECT

- Cornerstone for treatment decisions and interventions.
- Identifies the cause and nature of the patient's issues comprehensively.
- Establishes database for informed patient care decisions
- Crucial in conditions like incontinence for stability and timely intervention.
- Significantly improves patient outcomes and reduces morbidity/mortality rates.
-

➢ **Recognition of Physiological Abnormalities:**

- Identifies changes in vital signs and other indicators.
  Helps uncover underlying health issues promptly

➢ **Timely Interventions:**

- Detailed evaluation enables immediate actions to prevent negative outcomes.
- Facilitates timely interventions to optimize patient care.

➢ **Turnaround Time (TAT) Standards:**

- Ensures timely and efficient assessment in ICUs (within 30 minutes) and wards (within 60 minutes).

  Initial evaluation reports include medical history, physical exam findings, vital signs, and allergies

OBJECTIVES

- **Primary Objective:**

- To assess the TAT for the initial assessment of patients in ICUs and wards according to guidelines in Venkateshwar Hospital.

- **Secondary Objective:**

1. To perform a process gap analysis using the data acquired.
2. To identify the factors responsible for the existing scenario in the hospital .

TITLE

Initial Assessment(TAT) of Patients in ICUs & Wards

INTRODUCTION:

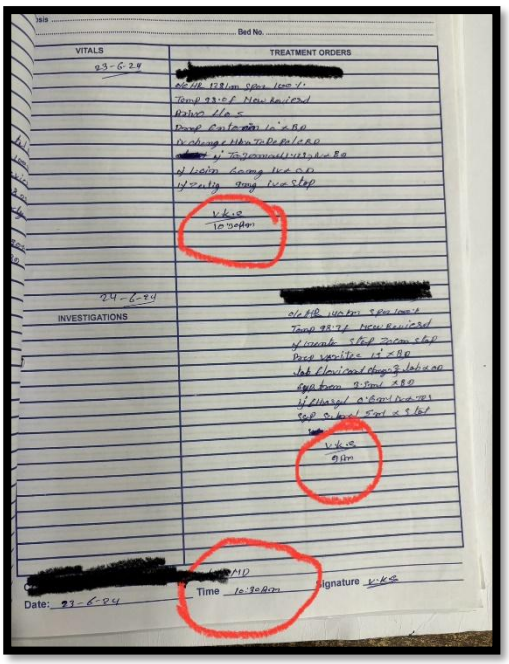
The objective of the initial assessment is to determine the etiology and nature of the patient's condition, utilizing this insight to inform subsequent evaluative stages. This process aims to develop a comprehensive database to guide patient care decisions, ensuring timely and appropriate interventions for conditions that can be stabilized or improved. Early and accurate assessment increases the likelihood of identifying life-altering disorders, forming nursing diagnoses, initiating suitable interventions or therapies, and providing stabilizing care. Prompt recognition of physiological abnormalities through changes in vital signs allows medical professionals to take immediate action, mitigating negative outcomes and reducing morbidity and mortality.

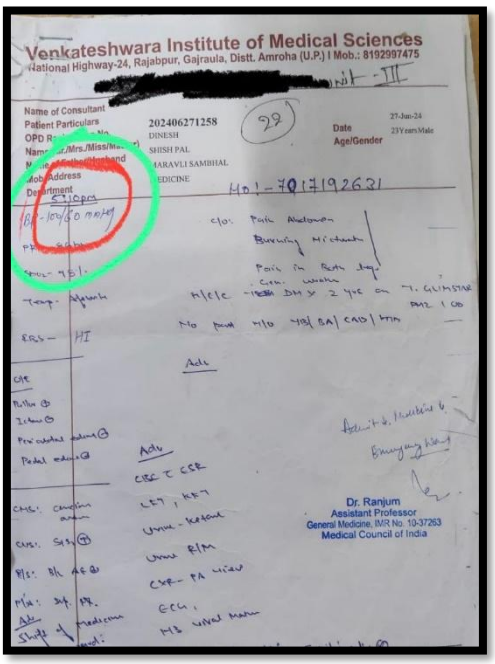
Conducting thorough assessments is essential for safe and high-quality care, despite the challenges posed by the fast-paced, resource-constrained healthcare environment. The foundation of safe practice includes comprehensive assessments, critical thinking fostered by discussion, and effective communication.

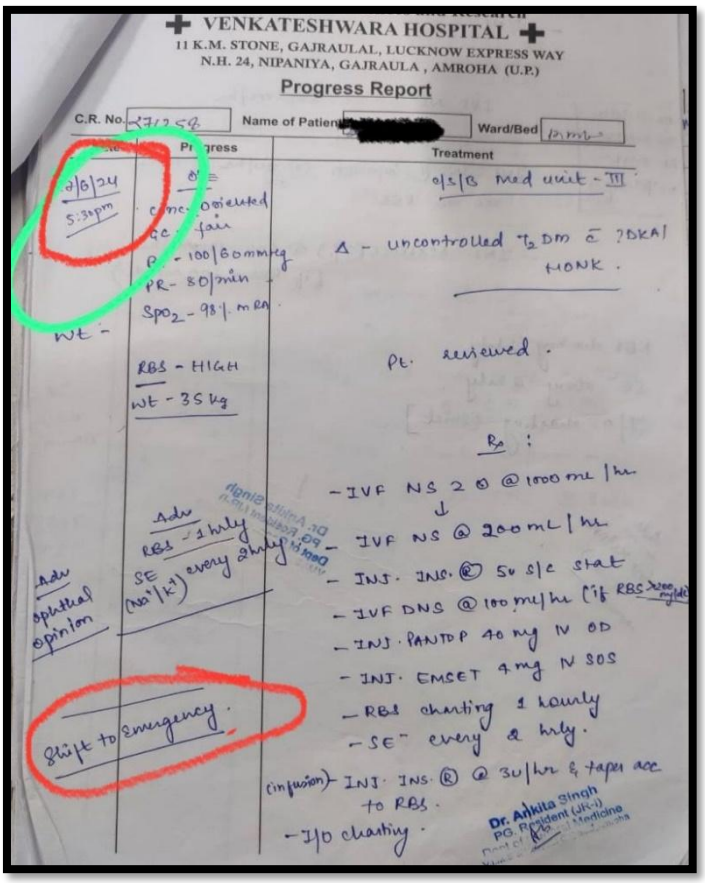
The initial history and physical examination reliably identify critical conditions. The nursing assessment collects detailed information on the patient's physiological, psychological, sociological, and spiritual needs, forming the first stage of a successful patient evaluation. This process involves gathering both subjective and objective data, including vital signs such as temperature, heart rate, blood pressure, respiration rate, and pain level using an age- or condition-appropriate pain scale. This assessment facilitates the development of a nursing diagnosis, determining the patient's current and future care needs, and prioritizing actions by distinguishing between normal and abnormal patient physiology.

Turnaround time (TAT) standards for initial assessments in ICUs and wards are established throughout hospitals and may be adjusted based on departmental needs. Assessments may be conducted by various staff members, each within the scope of their registration, practice area, and relevant legal and regulatory frameworks. Initial assessments must be performed by medical professionals, combining the patient's arrival time and assessment time. Organizations determine the timeframe for completing the initial assessment based on patient needs. According to NABH guidelines, the assessment period should start when the patient registers or arrives at the ICU or ward and conclude within 30 minutes for ICUs and 60 minutes for wards. Initial evaluation reports should include the patient's medical history, physical examination findings, vital signs, and any drug allergies. If a thorough evaluation of a newly admitted patient has already been conducted, it need not be repeated in full. The initial evaluation also involves a nursing assessment at the time of admission to identify any urgent needs, which must be completed within the designated timeframe. The preliminary evaluation generates a care plan for documentation.

A care plan is developed based on the initial evaluation and, if applicable, the results of diagnostic testing. This plan includes provisional diagnoses, necessary diagnostic tests, recommended initial care, and specific instructions if applicable. The care plan is subject to modification or revision upon re-evaluation.







OBJECTIVE OF THE STUDY

-To research the patient flow in wards and ICUs.

-Turnaround times for patients in ICUs and wards are used to calculate initial assessments.

- To conduct a process gap analysis.

-To provide a thorough data foundation for making decisions about patient care.

- It is necessary to give the patient the appropriate care at the appropriate moment.

-To ensure that the patient's care is based on an evaluation of their pertinent physical, psychological, and social needs.

Literature Review

Year	Author	Tittle	Method	Findings
2022	**Reed Hepler** **Rachel** **Torrens**	What is the Initial Assessment of a Patient?	Activities of daily living scale, Health questionnaires such as those that address recent travel and exposure risks	This study seeks to give policymakers and healthcare professionals a thorough grasp of the variables affecting turnaround time as well as suggestions for improving efficiency. The review's conclusions will help to enhance patient care, shorten wait times, and allocate resources more efficiently in both ward and ICU settings.
2011	Bernhard B, Martin and Volker, Fleur Fritz	A Systematic Review of Turnaround Times (TAT) for Mapping	Quantitative Self-Report Survey, Evaluation.	Although Turnaround Time (TAT) measurement is a standard approach for analyzing clinical process durations, comparing studies proves challenging due to the diverse definitions employed. However, in laboratory and radiology settings, a significant number of studies utilize comparable TAT definitions.
2023	Mara Plaud Rivera	What is a gap analysis in healthcare?	Strategically allocating your time and resources to projects that significantly impact outcomes is crucial for enhancing performance. By utilizing strategic planning tools such as ClearPoint, you can seamlessly align all activities with your goals and efficiently evaluate performance.	The programme enables You to connect any suggested enhancement to organizational objectives so you may assess the effectiveness of your gap plan and determine potential future actions. Summary reports are widely used by our clients for gap evaluations of information pertaining to the present and intended states.

Research Methodology

Study design: Observational, descriptive study.

Data Source: Primary data was provided by the Venkateshwar institute of Medical Sciences through observation and patient files were used to conduct the research.

Study Variable: TAT (turnaround time) for initial assessment of patients in ICUs and wards, and patient flow in wards and ICUs.

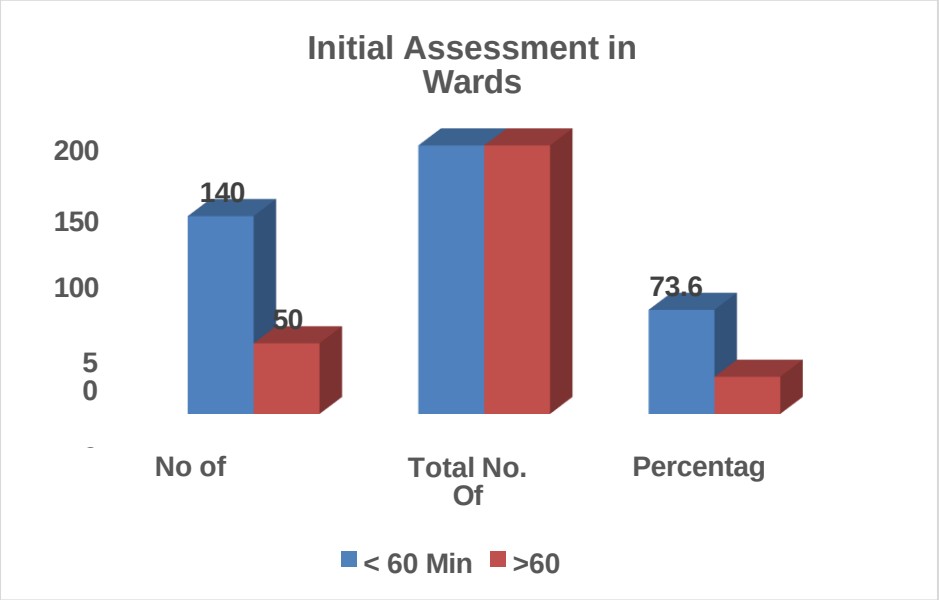
Data analysis: First, the data collected through secondary sources were arranged in order to produce a structured self-list. The sample consists of 190 patients from wards and 50 from ICUs. Data analysis was conducted through advanced Microsoft Excel features.

Convenient Sampling was used due to operational restrictions within a hospital.

Observation and Findings

Initial Assessment in Wards

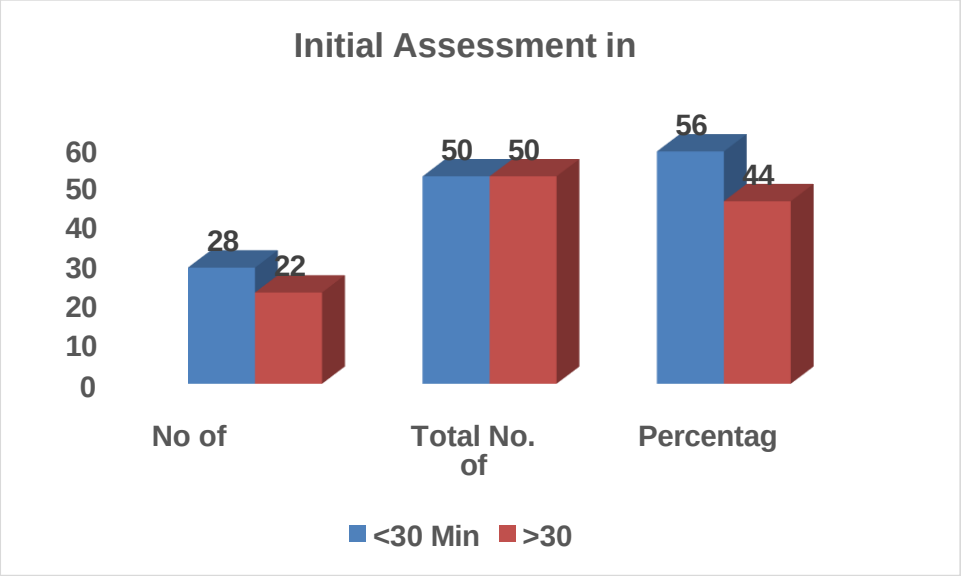
Time	No of Patients	Total No. Of Patients	Percentage
< 60 Min	140	190	73.68
>60 Min	50	190	26.32



Out of total 190 samples that were observed ,140 samples were found be compliant and 50 samples were found to be non-compliant within given time frame according to NABH guideline.

Initial Assessment in ICUs

Time	No of Patients	Total No. of Patients	Percentage
<30 Min	28	50	56
>30 Min	22	50	44



Out of total 50 samples that were observed,28 samples were found to be compliant and 22 samples were found to be non-compliant within given time frame according to given time frame.

DISCUSSION

Causes that delayed the initial assessment Turnaround time of patients in wards and ICUs were

-Lengthy duration since doctors were frequently preoccupied with other patients**.**

-Poor communication between the medical and nursing staff.

-Single doctor appointed for two floors.

Addressing these factors would decrease the initial assessment TAT to an optimum level.

- If these issues were resolved, the first assessment TAT would be reduced to its ideal level.

-There should be regular doctor rounds in the wards and ICUs.

-Each level should have its own doctor, according to experts.

The achievement of the targeted result will be aided by the development of stronger nursing and medical staff communication.

RECOMMENDATIONs

1. TAT for ICU needs more attention as it acts as a critical center for patients requiring immediate attention.
2. Optimizing these factors would reduce the initial assessment turnaround time (TAT) to an optimal level.
3. Resolving these issues would bring the first assessment TAT down to its ideal level.
4. Wards and ICUs should have regular doctor rounds.
5. Each level should be staffed with dedicated doctors, as recommended by experts.
6. Improved communication between nursing and medical staff will help achieve the desired outcomes.

CONCLUSION

Initial assessment Turn Around Time (TAT) in wards and ICUs should be compliant according to NABH guideline which is 60 minutes for wards and 30 minutes for ICUs. Following a thorough analysis of the collected data at Venkateshwar Institute of medical sciences, I gained a conclusion that there has been:
- 73.68% initial assessment Turn Around Time (TAT) in wards were less than 60 minutes.
- 26.32% is beyond 60 minutes.

In ICUs initial assessment Turn Around Time (TAT) were:

-56% which were under less than 30 minutes

- 26% were beyond 30 minutes.

In conclusion, addressing the turnaround time (TAT) for ICU assessments is crucial, given its role as a critical center for patients needing urgent care.

Optimizing these factors can significantly reduce the initial assessment TAT to an optimal level, enhancing efficiency and patient outcomes. Implementing regular doctor rounds in both wards and ICUs, along with assigning dedicated doctors at each level as recommended, is essential. Furthermore, fostering improved communication between nursing and medical staff is paramount for achieving desired outcomes in patient care and treatment.

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