A COMPREHENSIVE PROJECT REPORT ON

INITIAL NURSING ASSESSMENT – QUALITY INDICATOR
AT
HCG HOSPITALS, AHMEDABAD, GUJARAT

Submitted in fulfilment of the degree of

MASTER OF BUSINESS ADMINISTRATION
HOSPITAL AND HEALTHCARE MANAGEMENT

SUBMITTED BY:
Dr. Vishra Shah
SEMESTER 4 (2019-2021)
[000MTMBHC192005]

SUBMITTED TO:

NATIONAL FORENSIC SCIENCES UNIVERSITY
SCHOOL OF MANAGEMENT STUDIES

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CERTIFICATE

This is to certify that Dr. Vishra Shah worked under my/our guidance during the Fourth Semester from January 2021 to May 2021 for dissertation work entitled "Initial Nursing Assessment – Quality Indicator at HCG Hospitals, Ahmedabad". The dissertation report submitted here is the outcome of the above mentioned work which is original and has not been submitted in part or full for any other degree or diploma course of this university or any other universities.

The dissertation report is forwarded to the University for Evaluation.

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CERTIFICATE

It is certified that Dr. Vishra Shah has undertaken a project on "Initial Nursing Assessment – Quality Indicator" and prepared the dissertation in Masters of Business Administration – Hospital and Healthcare Management as a bona fide student in the School of Management Studies, National Forensic Sciences University, Gandhinagar, during the Fourth Semester from January 2021 to May 2021. The work was carried out by the student under the supervision of the faculty of School of Management Studies

Dr. S.O. Junare
Director
School of Management Studies
National Forensic Sciences University, Gujarat

HCG
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HCG/HMS/HR/2021-22/0031

19th May 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr Vishra Shah**, from School of Management Studies under National Forensic Sciences University, Ahmedabad has successfully completed her internship in Healthcare Global Enterprises Ltd. in the department of Quality from 18th January 2021 to 09th May 2021.

We are satisfied with her excellence in her skills and wish her success in all future endeavors.

For, Healthcare Global Enterprises Ltd.

Sulagna Panda
Manager-HR

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DECLARATION

I hereby declare that the dissertation entitled "Initial Nursing Assessment – Quality Indicator" embodies the work carried out by the under the supervision of Dr. Kalgi Shah, Assistant Professor of School of Management Studies and Ms. Upasana Patel, Executive – Quality, HCG Hospitals. The work has been carried at School of Management Studies, National Forensic Sciences University and HCG Hospitals during the fourth semester from January 2021 to May 2021

Dr. Vishra Shah

MBA – Hospital and Healthcare Management

School of Management Studies

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PREFACE

This project report has been prepared in the partial fulfilment of the DISSERTATION OF MASTER OF BUSINESS ADMINISTRATION – HOSPITAL AND HEALTHCARE MANAGEMENT, semester 4, Batch of 2019-2021

For preparing this Project Report, I have worked with HCG Hospitals, Ahmedabad in the suggested duration to avail the necessary information for the study. The blend of learning and knowledge acquired during my practical study at HCG Hospital has been presented in this Project Report. The rationale behind this study is to understand the time duration taken during the Initial Assessment of Inpatients by the Nursing staff and to understand the factors contributing towards it and resolve it by undertaking Corrective and Preventive Actions in order to provide quality of care to the inpatients of the Hospital.

ACKNOWLEDGEMENT

I would like to extend my sincere & heartfelt obligation towards all the personages who helped me in this endeavour. Without their active guidance, help, cooperation & encouragement, I would not have made headway in the project.

First of all, I would like to thank God who has always guided me to work on the right path of life. I am greatly indebted to my parents and my family for their words of encouragement, love and blessings.
I am thankful to the Course Director, Dr. S.O. Junare for his support. I am inevitably thankful and grateful for my Program Coordinator and my mentor Dr. Kalgi Shah, Assistant Professor for her support and guidance in completion of this report.

I would like to render my sincere thanks to HCG Hospitals, Ahmedabad for providing me the opportunity to do my major internship and get this experience in a highly prestigious organisation. Furthermore, I would like to extend my gratitude towards Mr. Birsingh Chaudhari, COO for providing me this opportunity. I express my inexplicable gratitude to Ms. Upasana Patel, Quality-Executive, for being my mentor, for her advice and encouragement rendered at every stage. I would also like to extend my gratitude to the whole staff who has directly and indirectly helped in completion of this project report. The guidance and support received from all the members who contributed to this report was vital for the completion of this project. I pay my reverence for these two Institutes, National Forensic Sciences University and HCG Hospitals, Ahmedabad. I am undeniably proud to be associated with this University and had a privilege of learning various aspects of hospital management at HCG Hospitals, Ahmedabad

I Extend my gratitude to National Forensic Sciences University for giving me this opportunity and all our professors who gave us visionary view and deep insight of all subjects. I would like to thank my professors Ms. Vandana Poturaju, Assistant Professor, Dr Haresh Barot, Assistant Professor, Dr. Ashwini Pandit, Assistant Professor and Ms. Aanika Neel, Assistant Professor for their kindness and motivation. At last but not least gratitude goes to all of my friends who directly or indirectly helped me to complete this project report, thanks for always inspiring me.

Any omission in this brief acknowledgement does not mean lack of gratitude.

With Gratitude,
Dr. Vishra Shah

CONTENTS

LIST OF TABLES

LIST OF CHARTS

PROJECT PROFILE

SR. NO.	PARTICULARS	DESCRIPTION
1	PROJECT TITLE	A Comprehensive Project Report on Initial Nursing Assessment – A Quality Indicator
2	ORGANISATION	HCG Hospitals, Ahmedabad
3	FIELD OF PROJECT	Quality
4	METHODS USED	Descriptive
5	TOOLS USED	Microsoft Excel
6	SOURCES	Initial Nursing Assessment Form
7	INTERNAL GUIDE	Dr. Kalgi Shah
8	EXTERNAL GUIDE	Ms. Upasana Patel
9	SUBMITTED BY	Dr. Vishra Shah

INTRODUCTION

- HCG Hospital is a state of the art healthcare facility located in the heart of the Ahmedabad, Gujarat.
- Hospital provides Multi specialty healthcare services of international standards and has on panel eminent consultants of their respective fields.
- The hospital has healed patients coming from all over India as well as other countries such as U.S.A., U.K., other European countries, South Africa, East Africa etc.
- Embarking on a journey of the finest expertise and quality healthcare with a human touch, HCG Hospital was founded in the year 2002.
- Established on principles of compassion, caring outreach and community partnership, HCG has served the wide-ranging medical needs of Gujarat, as well as, western India with the highest level of know-how and healthcare across the region.
- An exceptional centre of excellence, HCG Hospitals, a 125 bed hospital, is a part of **"Health Care Global Enterprises Ltd." (HCG)** having its presence at over more than 30 locations spread across India.
- Team HCG is dedicated to make the stay of patients comfortable and a positive one. This is possible only with hard work combined with the trust and confidence of the patients.
- The hospital is owned by corporate group 'Health Care Global' and is a for profit organisation.
- India is emerging as a preferred healthcare destination for patients across the globe and Gujarat has made a prominent footprint on the map of medical tourism.
- HCG has been successful in gaining the trust of many patients across the world.
- HCG Hospitals, Ahmedabad is NABH accredited for Quality standards.

Salient Features

A tertiary care unit with excellent diagnostic facilities.

The team of doctors at HCG Hospital is best in their fields with a vast experience in the disciplines of Medicine

Mission

- To provide quality healthcare services & facilities to the patients in order to restore their health as swiftly and safely as it can be done.
- To meet this objective, we will standardize healthcare delivery procedures, use smart technology for error free services and continuously train care providers to achieve better clinical outcome.
- We also will foster better relationships with all stakeholders including our doctors

Vision

Creating values for stakeholder by setting exceptional standards in healthcare through the provision of 360-degree care, optimal cure and the highest comfort with the help of advanced technology and highly skilled manpower

Values

Empathy

Ethics

Excellence

Integrity

Transparency

Scope of Services and Facilities –

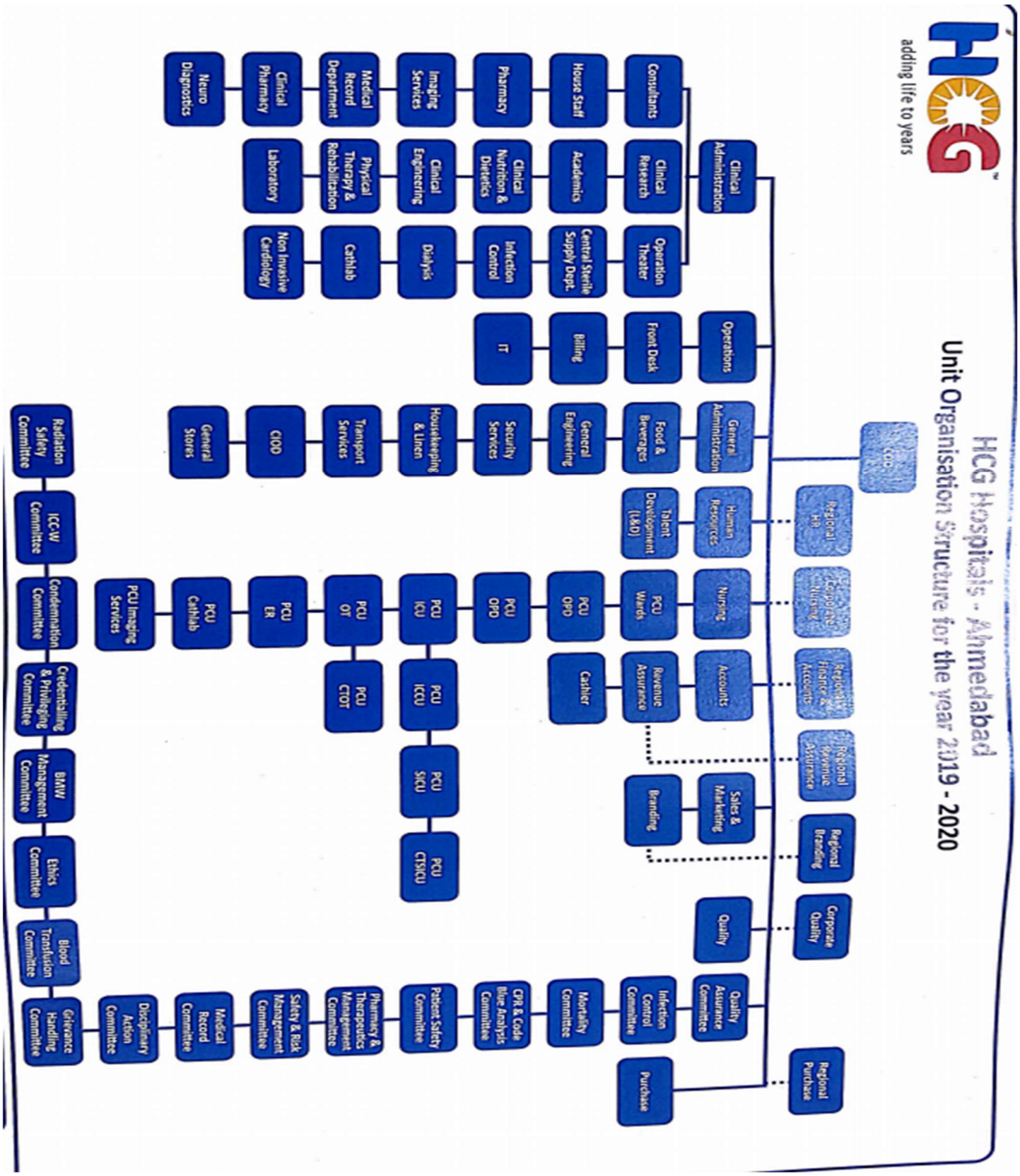
Orthopaedic and Joint surgery	Preventive Health Check-up	Spine Surgery
Arthroscopy and Sport medicine	Dentistry	Internal Medicine
Emergency medicine	Cardiology	Cardiovascular and thoracic surgery
Neuroscience	Gastroenterology	Bariatric surgery
ENT	Pulmonology	Critical care medicine
Nephrology	Pathology	Day-care
Pharmacy	Radiology and Imaging	

- HCG Home Healthcare is a unique initiative, which aims to provide primary home health care services at home.
- The Homecare arm of HCG makes it possible for to avail expert healthcare services at home for faster and convenient recovery of patients.
- HCG Home HealthCare provides trained and dedicated nursing care at home for chronic disease management and administering medication, pain management, wound care, infusion, and post-operative care.
- The trained and qualified expert doctor can perform diagnosis and consultation to primary treatment for non - emergency conditions.
- A trained attendant will be a caregiver to help in healing faster in the ambience of one's own home. Medical equipment plays an important role in healing.
- Essential and wide range of medical equipment enhances your recovery.
- Digital Marketing and Community Awareness Participation HCG has several brochures and ads advising patients for different types of healthcare services provided.
- Many news recognitions for celebrating several days such as World Cancer Day, Mothers' Day, Introducing Cath lab, Urology Centre.
- HCG has organized a Cancer Awareness Rally on World Cancer Day and has come out with a theme song for #Clapforthem.
- The story of a father and daughter on a journey to quit tobacco. HCG has launched a campaign to help people quit the habit of tobacco consumption.
- HCG has organized several multi-specialty camps across various places in Gujarat such as Bavla, Vadodara, Rajkot etc.

Milestones:

- 2002 - Founded as Medi Surge Hospital
- 2007 – Acquired by HCG & renamed as HCG Hospitals
- 2008 – 76 total beds, 20 ICU beds
- 2011 – Cath lab Installation
- 2012 – Cardiac OT installation
- 2013 – NABH Accreditation
- 2014 – 114 total beds, 39 ICU beds
- 2015 – Upgradation of emergency department, Started Home Care Department
- 2016 – NEW ANNEXE OPD wing for CRRT
- 2017 – ECMO machine installation, Opening of Sports and Arthroscopic Clinic
- 2018 – Upgradation of OTs
- 2019 – Philips Azurion 7m20 Cath lab Launch

ORGANOGRAM OF THE HOSPITAL



QUALITY DEPARTMENT

CQI is an approach to quality management that builds upon traditional quality assurance methods by emphasizing the **organization** and **systems**: it focuses on "process" rather than the individual; it recognizes both internal and external "customers"; it promotes the need for objective data to analyse and improve processes.

Core Steps in Continuous Improvement

- A well-developed team that has knowledge of the system needing improvement.
- Define a clear aim.
- Identify and define areas needing improvement
- Brainstorm potential change strategies for producing improvement.
- Plan, collect, and use data for facilitating improvement in quality
- Apply the scientific method to test and refine changes.

Purpose

The purpose of this manual is to provide guidelines for Continuous Quality Improvement process of the organization. Its further ensures that:

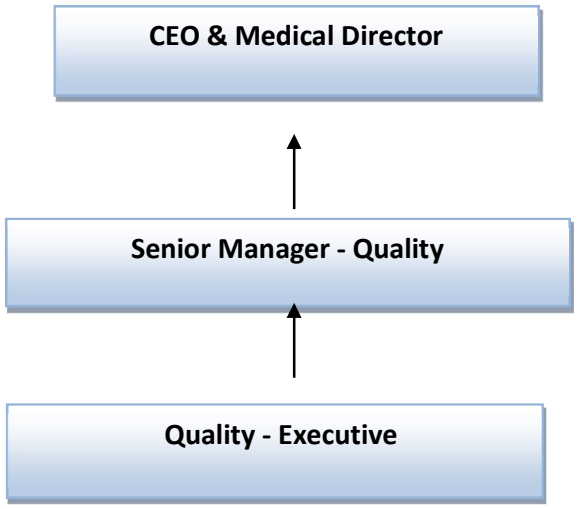
- Continuous quality improvement and monitoring of quality of organization
- Quality assurance programme supported by the organization
- Regular monitoring of quality check by clinical and quality indicators

Scope

This manual is applicable to all the departments of HCG Hospital, Mithakhali, Ahmedabad.

Responsibility

The responsibility of implementation of this manual lies with the accreditation coordinator, all departmental heads, all Committee chairpersons & the CEO & Medical Director



Continuous Quality Improvement Programme

In an endeavour to continually improve and keep the Quality Level at par with the best in the industry, Quality Improvement Programme is reviewed periodically with its periodicity not less than once a year. The purpose of review is to maintain the appropriateness of:

- Quality Objectives
- Service Standards
- Quality improvement Structure
- Activities under Quality improvement Programme

The program is comprehensive and covers quality of input, process and outcome. This has been developed by quality assurance committee and implemented by various committees, accreditation coordinator and other personnel.

Quality Improvement and continuous monitoring program is developed for following areas:

- Documentation
    a. Applicable hospital wide
    b. Applicable for radiology
    c. Applicable for intensive care areas
    d. Applicable for surgical services
    e. Applicable for infection control
- Performance Indicators
    a. Validation
    b. Monitoring & Analysis
    c. Improvement through corrective and preventive actions
- Internal Audits
- Clinical Audits
- Incident & sentinel event reporting

Continuous Quality Assurance Programme

The program which is applicable hospital wide is explicitly tabulated. Quality assurance committee will implement, monitor and improve the program.

LITERATURE REVIEW

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
C. Fernandez Sola Dec. 2012	Development and validation of an instrument for initial nursing assessment	Design and validation of an initial nursing assessment instrument to be used in clinical and educational environments in Santa Cruz	Stratified Sampling Sample Size – 12	the inclusion of physical assessment to complement psychological and social evaluation is recommended to guarantee comprehensive instead of fragmented care	The instrument's nursing focus contributes to the development of nurses' own role and to its incorporation into the international nursing trend that enhances the standardization of practice and the development of a universal nursing language to express nursing phenomena.
Alexandra – Benhart Just 2010	Representing the Nursing Process With Nursing Terminologies in Electronic Medical Systems	A framework model within a selected nursing classification system for the integration of nursing care processes into a clinical information system	Sample size – 14 Hospitals The project team, consisting of nursing scientists (n = 5), clinical nursing specialists (n = 7), and computer specialists (n = 2)	The electronic patient record software suggests suitable concepts and terminology from its database, along with corresponding nursing care processes or actions, it guides the nurses through the necessary steps for decision making	An electronic patient record should be constructed logically and have a working interface that not only supports clinical decision making but also offers intuitive use by nurses' in their everyday practice.

AUTHOR DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	RESULTS	CONCLUSIONS
Michael J. Rothman, Steven Rothman 2012	Clinical implications and validity of nursing assessments: a longitudinal measure of patient condition from analysis of the Electronic Medical Record	Investigates risk of mortality associated with nurses' assessments of patients by physiological system. It hypothesise that nursing assessments of in-patients performed at entry correlate with in-hospital mortality, and those performed just before discharge correlate with post discharge mortality.	Sample size - 42302	Patients whose entry nursing assessments, other than pain, did not meet minimum standards had significantly higher in-hospital mortality than patients meeting minimums; and final nursing assessments before discharge had large OR post discharg mortality	Nursing assessment data, which are currently unused, may allow physicians to improve patient care. The mortality OR and the dynamic nature of nursing assessments suggest that nursing assessments are sensitive indicators of a patient's condition.

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Heleena Laitinen, 2010	Patient-focused Nursing documentation expressed by nurses	The aim of the study was to investigate what expressions nurses use when documenting patient-focused nursing care in electronic patient records	Grounded theory Approach Sample Size – 40 Qualitative method	Three categories emerged from the data Patient's voice the patient has expressed his /her thoughts, which are written by the nurse, Nurse's view: the nurse recounts the patient's own thoughts, state or situation and mutual view in patient–nurse relationship: the documentation describes the patient–nurse relationship.	This study found that the nursing documentation was patient-focused, to some extent. This is significant because nursing documentation represents much more than simply a record of the continuity of care
Lees L, 2010	Improving the quality of nursing documentation on an acute medicine unit.	To improve nursing documentation, as well as the quality of nursing assessments and evaluation in an acute medicine unit using an action research approach.	Action Research Approach	Focused Interventions were made to the documentation assessment process to promote improvement in the areas that demonstrated poor completion or compliance.	Care planning must be taught in pre-registration training as a fundamental principle of care. Understanding issues pertinent to a busy area and designing a process that makes of documentation easier means changes can be sustained long after the active stages of action research have been completed.

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Barbara A. Mark, David W. Harless, Michael McCue, Yihua Xu, 2004	A Longitudinal Examination of Hospital Registered Nurse Staffing and Quality of Care	To evaluate previous research findings of the relationship between nurse staffing and quality of care by examining the effects of change in registered nurse staffing on change in quality of care.	Study Design – Data from a longitudinal cohort of 422 hospitals were analysed from 1990–1995 to examine the relationships between nurse staffing and quality of care.	Increasing registered nurse staffing had a diminishing marginal effect on reducing mortality ratio, but had no consistent effect on any of the complications. Selected hospital characteristics, market characteristics, and financial performance had other independent effects on quality measures.	The findings provide limited support for the prevailing notion that improving registered nurse (RN) staffing unconditionally improves quality of care.
Karen Lasater, Douglas Sloane, Matthew Mchugh, 2020	Evaluation of hospital nurse-to-patient staffing ratios and sepsis bundles on patient outcomes	Despite nurses' responsibilities in recognition and treatment of sepsis, little evidence documents whether patient-to-nurse staffing ratios are associated with clinical outcomes for patients with sepsis	Cross – Sectional Study, Descriptive Analysis Sample size – 116 Hospitals	Adherence to SEP-1 bundles is associated with lower in-hospital mortality and shorter lengths of stay; however, the effects are markedly smaller than those observed for staffing.	Improving hospital nurse staffing over and above implementing sepsis bundles holds promise for significant improvements in sepsis patient outcomes

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Abhijit Chakravarty, Pooja Sajan, B.C. Nambiar, 2017	A qualitative study instrument for initial nurse assessment	No standardized form exists in the Armed Forces Medical Services to document initial nursing observations while a patient is being admitted in service hospitals. A focus group design was utilized to explore and conceptualize an initial nurse assessment form that may be utilized by service hospitals.	Descriptive study, Qualitative Approach, Sample Size – 8 Female Nurses	Patient assessment as a key theme in early recognition of patients at risk from clinical deterioration in hospital wards, with missed clinical markers being identified as a pertinent issue for nursing practice	Standardized initial nursing assessment in military hospitals will probably address a gap in the comprehensive patient care process being practiced by the Armed Forces health care system, perceived cost of nursing time in hospital ward
Cheryl Holly, Eilleen Poletick, 2010	A systematic review of nurses' inter-shift handoff reports in acute care hospitals	Appraise and synthesize the best available qualitative evidence pertaining to the nursing handoff report at the time of shift change and make recommendations that can enhance the transfer of information between and among nurses, and by extension, improve patient care.	Sample size – 21 papers	1) An embedded hierarchy exists that influences the conduct of inter-shift nursing handoffs; 2) Participating in inter-shift nursing handoffs are a way of becoming acculturated into the nursing unit's norms, expectations and rituals	Multiple ways of transferring information is recommended for the inter-shift nursing handoff as a way to manage information decay or funnelling and to address potential communication gaps due to in congruencies between the medical record, verbal handoff report and actual clinical condition.

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Jack Needleman Peter Buerhas, Katya Zelevinsky, 2002	Nurse-staffing levels and the quality of care in hospitals	Examine the relation between the amount of care provided by nurses at the hospital and patients' outcomes.	Examine the relation between the amount of care provided by nurses at the hospital and patients' outcomes.	No association between increased levels of staffing by registered nurses and the rate of in-hospital death or between increased staffing by licensed practical nurses or nurses' aides and the rate of adverse outcomes.	A higher proportion of hours of nursing care provided by registered nurses and a greater number of hours of care by registered nurses per day are associated with better care for hospitalized patients.
Robert L. Kane, Tatyana Shamliyan, Christine Mueller, Sue Duval, Timothy Wilt, 2007	The association of registered nurse staffing levels and patient outcomes: systematic review and meta-analysis	To examine the association between registered nurse (RN) staffing and patient outcomes in acute care hospitals.	Meta-Analysis, Odds Ratio	Studies with different design show associations between increased RN staffing and lower odds of hospital related mortality and adverse patient events	Patient and hospital characteristics, including hospitals' commitment to quality of medical care, likely contribute to the actual causal pathway.

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Ann E. Tourangeau, Diane Doran, Linda Hall, 2006	Impact of hospital nursing care on 30-day mortality for acute medical patients	Structures and processes of hospital care influencing 30-day mortality medical patients.	Multiple Regression Models Retrospective Study	Structures and processes of hospital nursing care had an impact on 30-day mortality for acute medical patients. Nurse staffing variables (proportion of Registered Nurses in the staff mix and nursing staff dose) were found to be predictors of 30-day mortality.	Structures and processes of hospital nursing care have an impact on patient mortality and survival. If hospitals have goals of minimizing unnecessary patient death for their acute medical patient population, they should maximize the proportion of Registered Nurses in providing direct care, even if this results in lowering total numbers of nursing personnel across all categories
Thitinut Sasichay-Akkade-chanunt, Cynthia C Scalzi, Abbas F Jawad, 2003	The relationship between nurse staffing and patient outcomes	To examine the association between in-hospital mortality and four nurse staffing variables -the ratio of total nursing staff to patients, the proportion of RNs to total nursing staff, the mean years of RN experience, and the percentage of nurses with bachelor of science in nursing degrees.	Retrospective, Cross-sectional, Observational Research Design Data of 2531 patients admitted to seven medical units and 10 surgical units of a 2300-bed university hospital in Thailand was used.	Ratio of total nurse staffing to patients was significantly related to in-hospital mortality in both partial and marginal analyses, controlling for patient characteristics	Understanding of the importance of nurse staffing and its relationship to the patient outcome of hospital mortality

AUTHOR/ DATE	THEORETICAL /CONCEPTUAL FRAMEWORK	RESEARCH HYPOTHESIS	METHODOLOGY	ANALYSIS AND RESULTS	CONCLUSIONS
Francisco Ja Carmona-Monge, Gloria M Rollán Rodríguez, Cristina Quirós Herranz, Sonia García Gómez, Dolores Marín-Moralesa, 2013	Evaluation of the nursing workload through the nine equivalents for nursing manpower use scale and the nursing activities score: A prospective correlation study	To determine the Relationship between nursing workload measured through the nine equivalents of nursing manpower using (NEMS) scale and that measured through the nursing activities score (NAS) scale and to analyse staff needs through each of the scales	Descriptive Prospective Design Sample Size – 730 ICU patients	The staffing requirements based on the NAS scale scores were significantly higher than those based on the NEMS scale. The mair difference was found when analysing staffing requirements, with higher staff numbers needed for the NAS scale.	Both NAS and NEMS can be used to measure the nursing workload in the ICU. Staffing requirements using NAS were higher than those using NEMS.
Sarah Burston, Wendy Chaboyer, Brigid Gillespie, 2014	Nurse-sensitive indicators suitable to reflect nursing care quality: a review and discussion of issues	To review nurse-sensitive indicators that may be suitable to assess nursing care quality.	Literature review.	Relationship between nursing structural variables and patient outcomes in acute care settings have explored potential indicators for specific patient groups and nursing roles. When using nurse-sensitive indicators, issues concerning the selection, reporting and sustained use are important for nurse managers to consider.	Nurses need to continue to strive to achieve agreement on the definitions of indicators, gather strong consistent evidence of nurse-sensitivity, resolve issues of regular data collection and consider selection, reporting and sustainment when implementing nurse-sensitive indicators.

OVERVIEW OF THE TOPIC

Quality Indicator – Initial Nursing Assessment

INITIAL ASSESSMENT OF PATIENT

A. Purpose

To ensure that all patients of the hospital undergo an appropriate assessment by qualified individuals on the basis of which a plan of care can be established.

B. Scope

Applicable to all patients in OPD and IPD of HCG Hospitals, Ahmedabad

C. Responsibility

The overall responsibility for implementation of this policy and its associated procedures is with the Head – Clinical Services & Head - Nursing Services

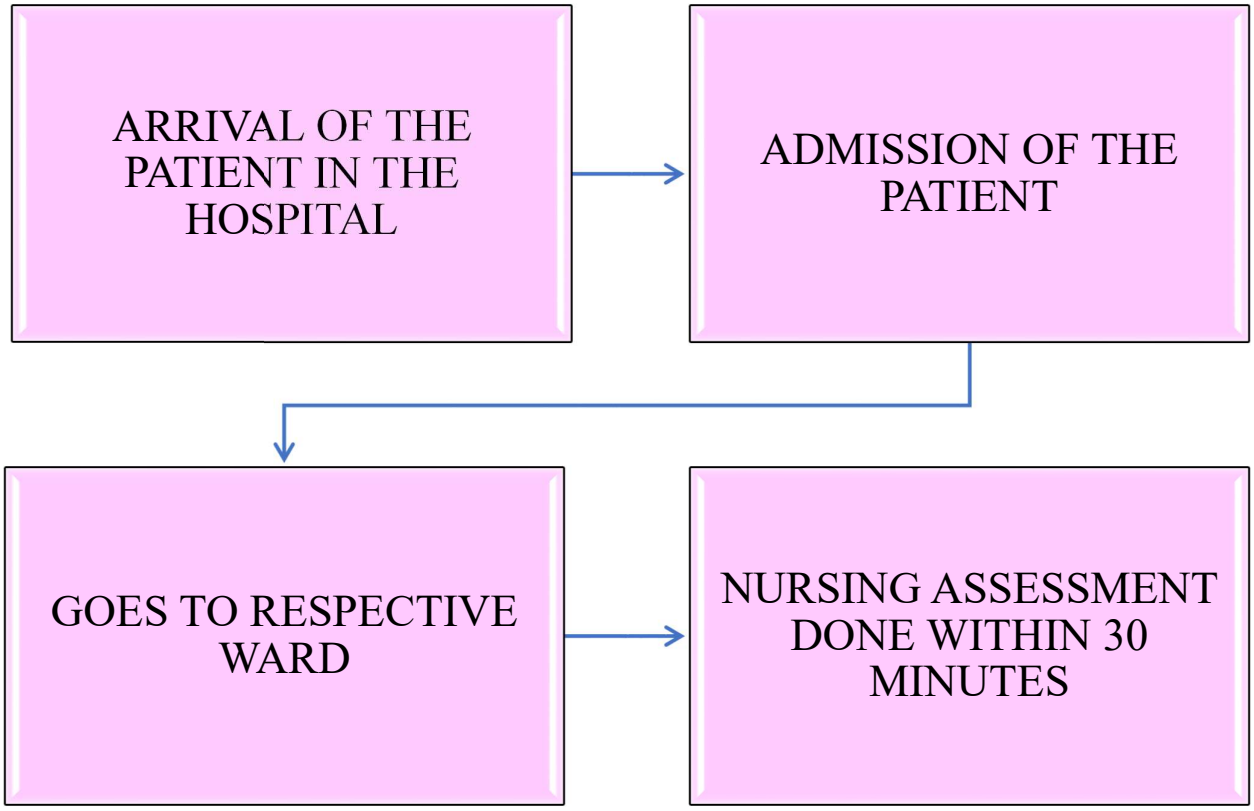
Every patient of the hospital (OPD, IPD and Emergency services) will be appropriately assessed for his / her clinical conditions on the basis of standard norms of medical practice. The initial assessment will result in a plan of care. These assessment and plan of care will be documented with sign, name, date and time duly endorsed by the person making the entry.

Guideline for Initial Assessment at IPD

Every patient being admitted will undergo the established initial clinical assessment on the basis of prescribed format. These assessments will be completed and documented in patient files within 24 hours of admission of the patient. However, for patients in critical conditions the initial assessment will be done immediately after admission within a defined time frame.

Sr. No.	Activity	Responsibility
1	Initial assessment is done and documented in medical record of the patient for all admitted patient	House officer & primary nurse
2	The assessment will include generic and individualized elements specific to patient age, diagnosis and condition.	House officer
3	Following elements will be considered for assessment as per requirement. These are generic in nature • Reason for admission • Physical status • Cognitive status • Psychosocial status • Communication status • Allergies • Special precautions • Pain • Medication use • Substance abuse • Domestic violence/neglect/abuse screening • Communicable disease exposure • Personal routines and self-care needs • Nutritional assessment • Physiotherapy assessment • Spiritual / cultural practices • Advance Directives (adults ≥ 18 years) • Educational status • Financial concerns • need for discharge planning • Belongings inventory and disposition.	House officer

PROCESS OF ADMISSION IN THE HOSPITAL



RESEARCH METHODOLOGY

❖ CHAPTER –4.1: OBJECTIVE

The rationale behind this study is to understand the time duration taken during the Initial Assessment of Inpatients by the Nursing staff and to understand the factors contributing towards it, resolve it by undertaking Corrective and Preventive Actions in order to provide quality of care to the inpatients of the Hospital.

❖ CHAPTER 4.2 -RESEARCH DESIGN

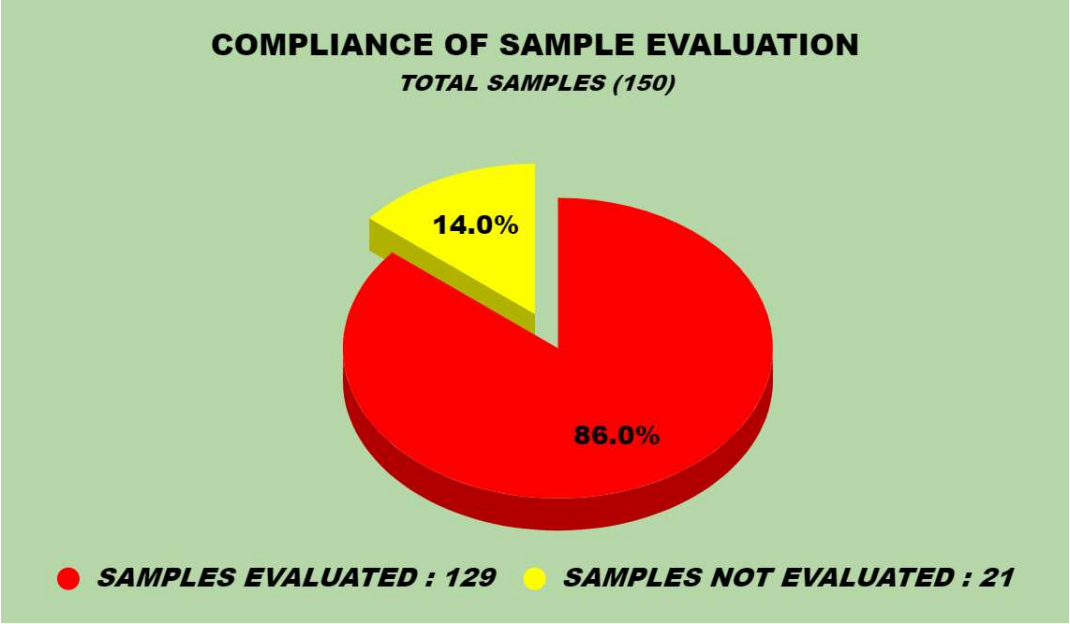
- **STUDY DESIGN**
  - Descriptive Study
- **SAMPLING METHOD**
  - Random sampling
- **TYPE OF DATA**
  - Primary Data
- **DATA COLLECTION TOOL**
  - IPD Forms
- **SAMPLING AREA**
  - HCG HOSPITALS, AHMEDABAD
- **COLLECTION OF SAMPLE**
  - January – March 2021
- **SAMPLING SIZE**
  - 150
- **TOOLS USED**
  - Microsoft Excel

ANALYSIS

TABLE – 1: DIVISION OF SAMPLES BASED ON EVALUATION

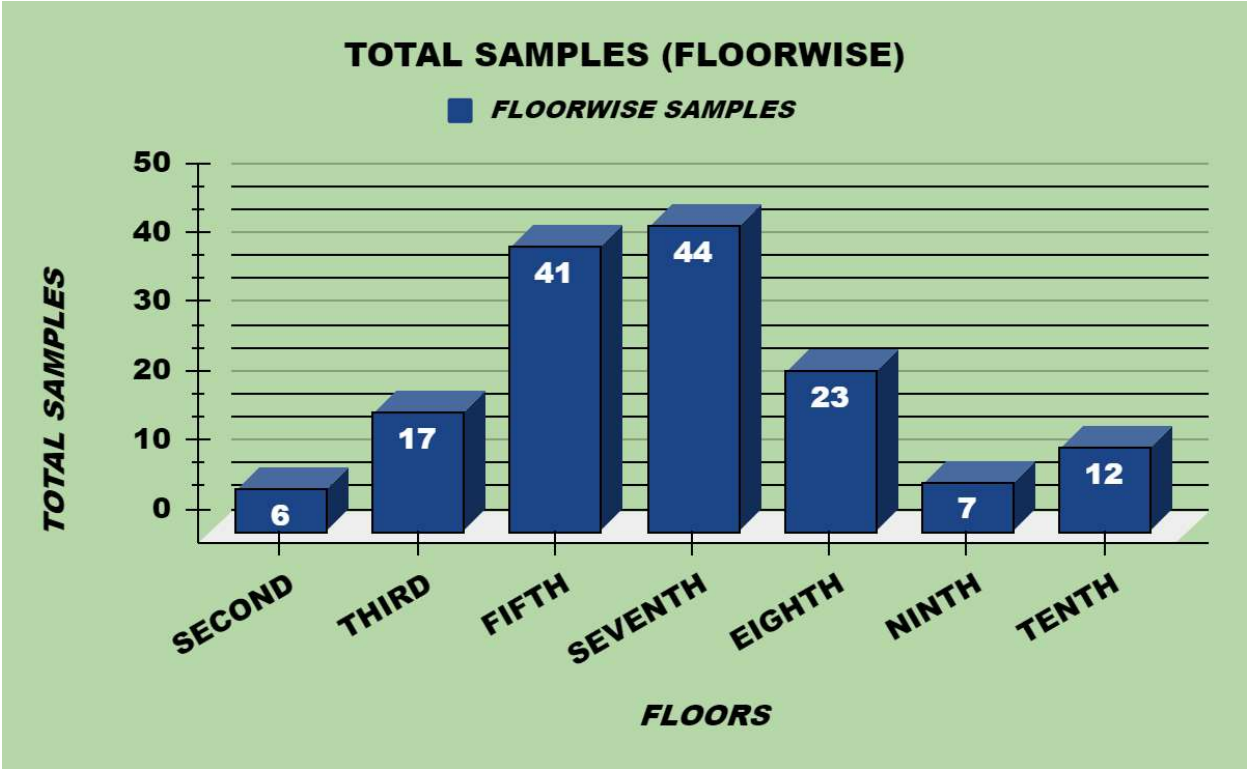
TOTAL SAMPLES	SAMPLES EVALUATED	SAMPLES NOT EVALUATED
150	129	21

CHART – 1: COMPLIANCE OF SAMPLE EVALUATION



ANALYSIS – Total sample collection is 150 out of which 129 samples were evaluated which accounts to be 86% of the sample size and 21 samples could not be evaluated which accounts to be 14% of the sample size.

CHART – 2: FLOORWISE DISTRIBUTION OF THE TOTAL SAMPLES



ANALYSIS – On the basis of Floor wise Distribution of the total samples, Fifth and Seventh floor consists of the highest number of samples – 41 and 44 respectively. Followed by Eighth floor consisting 23 samples, Third floor consisting 17 samples, Tenth floor consisting 12 samples, Ninth floor consisting 7 samples and lastly Second floor consisting of 6 samples of the total 150 samples.

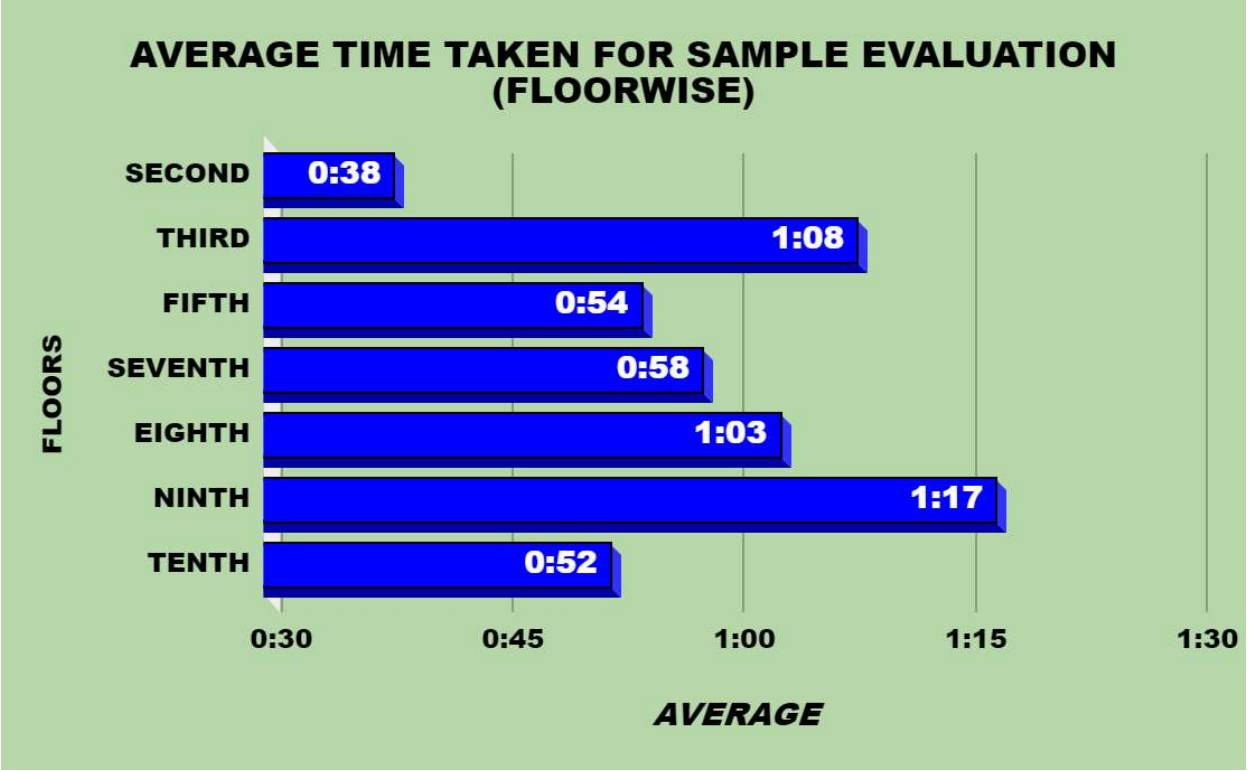
TABLE – 2: AVERAGE AND STANDARD DEVIATION OF THE SAMPLES COLLECTED OF THE HOSPITAL (BIFURCATION DONE BY FLOORS)

CALCULATION OF AVERAGE AND STANDARD DEVIATION:

(Initial Assessment time) – (Time of Admission in the addressograph)

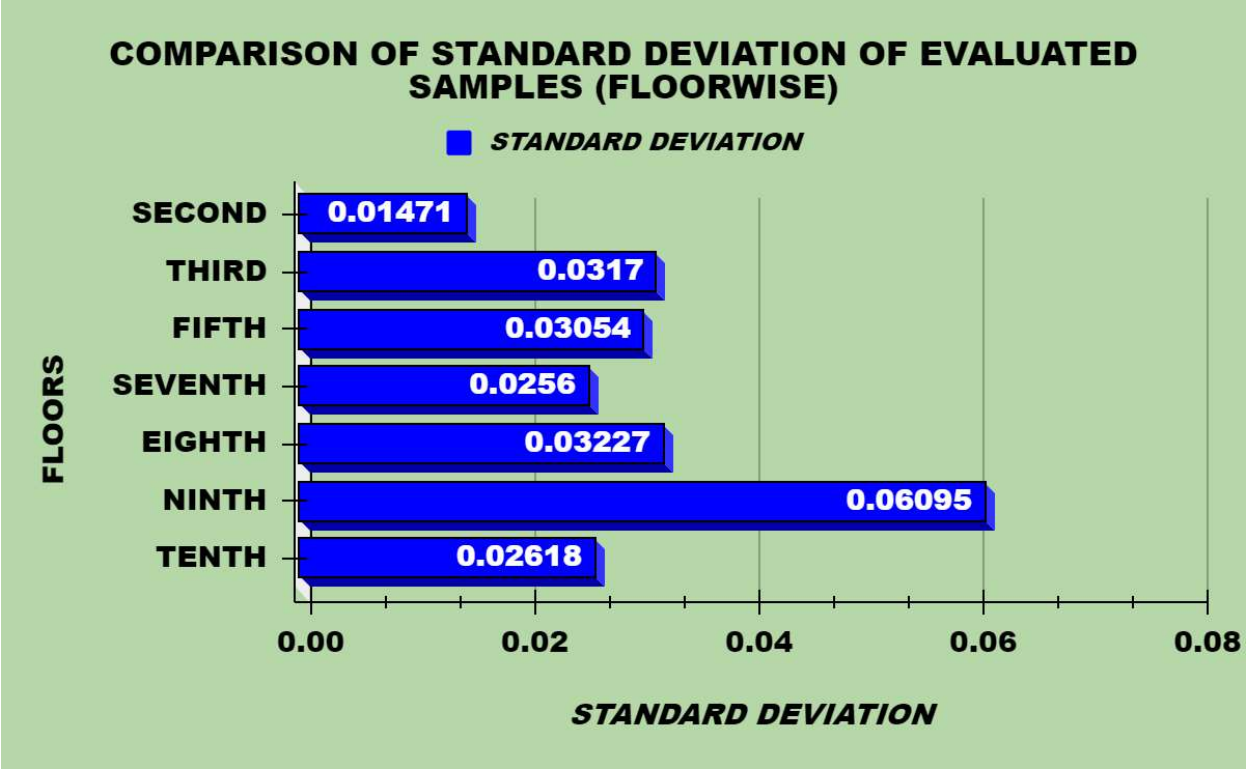
SR. NO.	FLOOR	NO. OF SAMPLES	(INITIAL ASSESSMENT TIME) – (TIME OF ADMISSION IN THE ADDRESSOGRAPH)	
			AVERAGE	STANDARD DEVIATION
1	SECOND	4	0:38	0.014713648
2	THIRD	14	1:08	0.0317
3	FIFTH	36	0:54	0.03054
4	SEVENTH	37	0:58	0.0256
5	EIGHTH	19	1:03	0.03227
6	NINTH	7	1:17	0.06095
7	TENTH	12	0:52	0.02618

CHART 3 – FLOORWISE DISTRIBUTION FOR THE AVERAGE TIME TAKEN FOR SAMPLE EVALUATION



ANALYSIS – It can be seen from above displayed graph that Average Time taken for Ninth Floor is the highest, followed by Eighth floor and Third floor which is 1hour 17mins, 1hour 8minutes and 1 hour three minutes respectively. Whereas Average Time taken for evaluation for Seventh, Fifth and Tenth are 58minutes, 54minutes and 52minutes respectively. Average time taken for evaluation is least for Second floor accounting to be 38minutes.

CHART 4 – FLOORWISE COMPARISON OF STANDARD DEVIATION OF EVALUATED SAMPLES

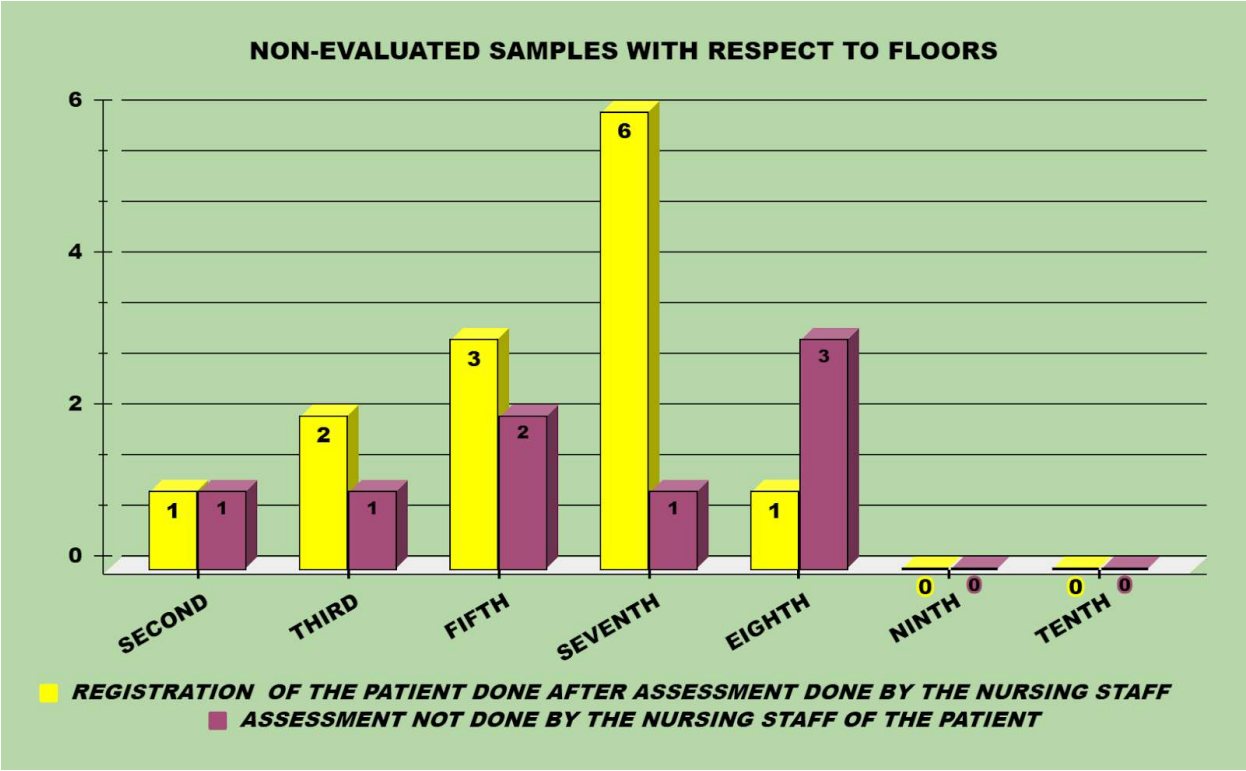


ANALYSIS - It can be seen from above displayed graph that Standard Deviation for Ninth Floor is the highest, followed by Eighth floor and Third floor which is 0.06095, 0.03227 and 0.0317 respectively. Whereas Standard Deviation for Fifth, Seventh and Tenth are 0.03054, 0.0256 and 0.02618 respectively. Standard Deviation is least for Second floor accounting to be 0.01471.

TABLE – 3: DETAILED DESCRIPTION FOR NON-EVALUATED SAMPLES (BIFURCATED BY FLOORS)

SR. NO.	FLOORS	SAMPLES NOT EVALUATED	REASONS	
			REGISTRATION OF THE PATIENT DONE AFTER ASSESSMENT DONE BY THE NURSING STAFF	ASSESSMENT NOT DONE BY THE NURSING STAFF OF THE PATIENT
1	SECOND	2	1	1
2	THIRD	3	2	1
3	FIFTH	5	3	2
4	SEVENTH	7	6	1
5	EIGHTH	4	1	3
6	NINTH	0	0	0
7	TENTH	0	0	0

CHART 5 – NON-EVALUATED SAMPLES WITH RESPECT TO FLOORS



ANALYSIS – Out of the 150 samples, 21 samples were not evaluated due to 2 reasons -1) Registration of the patient done after Assessment done by the nursing staff

2) Assessment of the patient was not done by the nursing staff

In the above graph, comparison of the samples consisting of the above mentioned reasons can be seen with respect to each floor.

From the 21 samples which were not evaluated, 13 samples from 5 floors were those in which Registration of the patient was done after the assessment was over and 8 samples were those in which Assessment of the patient was not done by the nursing staff.

Seventh floor consists of the highest number (6) of samples whose registration was done after the assessment was over and Eighth floor consists of the highest number (3) of samples whose assessment was not done altogether by the nursing staff.

TURNAROUND TIME (TAT) ANALYSIS

CALCULATION OF TURNAROUND TIME -*:*

(Final Assessment time - Initial Assessment time)

TABLE – 4: DIVISION OF SAMPLES BASED ON EVALUATION (TAT)

TOTAL SAMPLES	TOTAL SAMPLES EVALUATED	TOTAL SAMPLES NOT EVALUATED
150	140	10

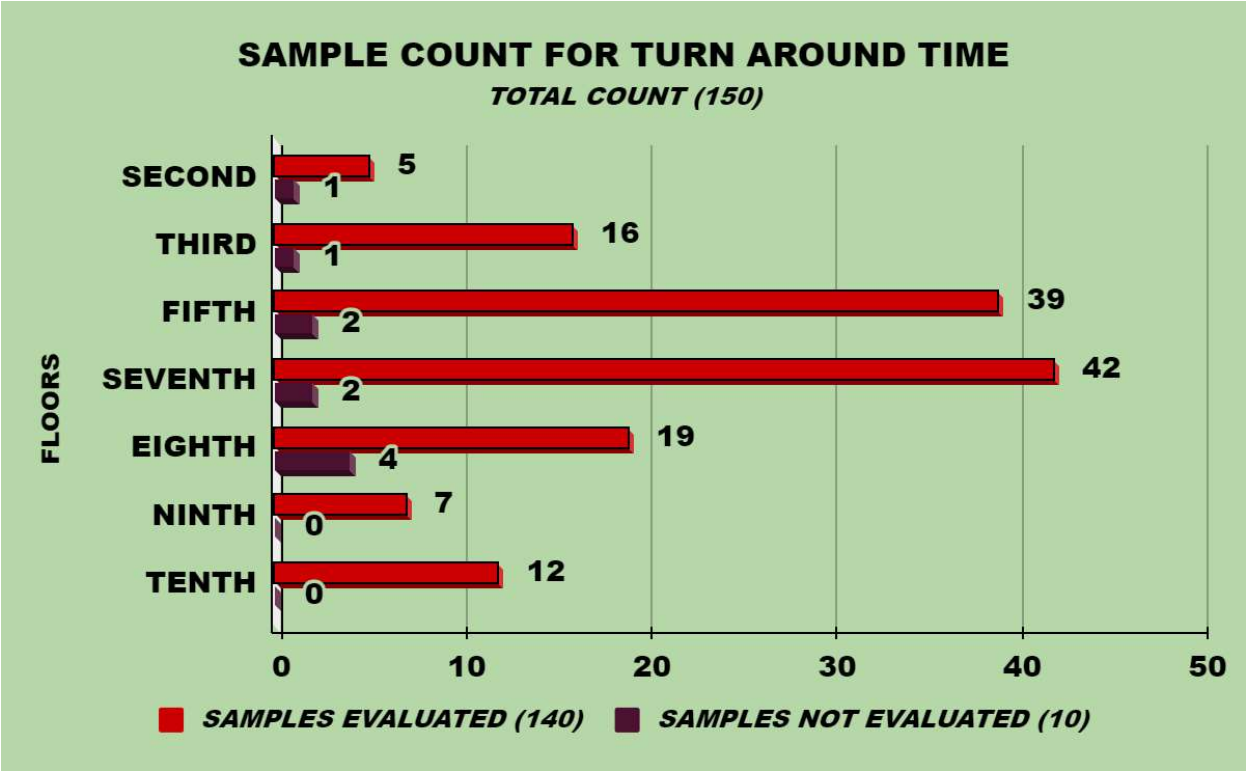
Total Samples – 150

Total Samples Evaluated – 140

Total Samples Not Evaluated – 10

Reason for non-evaluation of samples is that the assessment was not done by the nursing staff hence Turnaround Time could not be calculated for those 10 samples.

CHART 6 – SAMPLE COUNT FOR TURN AROUND TIME (TAT)

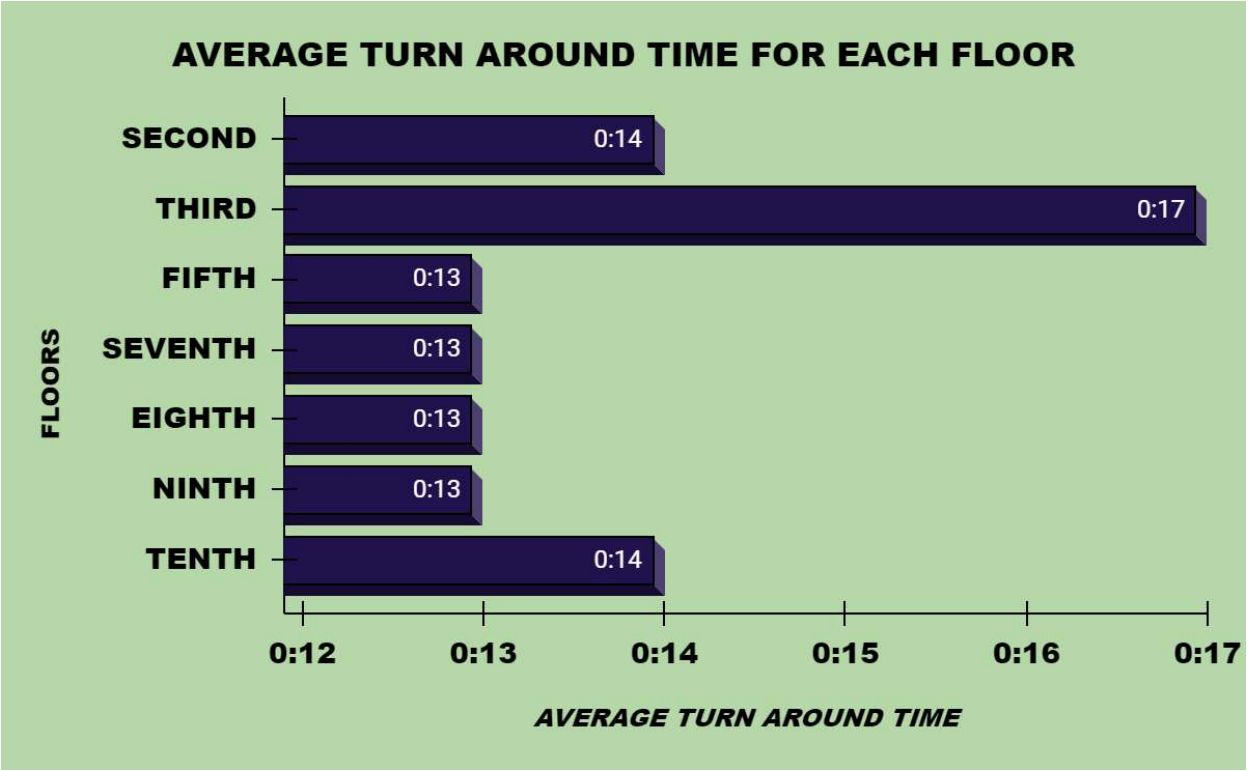


ANALYSIS – As seen above in the depicted graph, Highest number of samples (42) which are evaluated is that of Seventh floor and Highest number of samples (4) which are not evaluated is that of Eighth Floor.

TABLE – 5: AVERAGE OF TAT FOR EACH FLOOR OF THE SAMPLES COLLECTED AT THE HOSPITAL

SR. NO.	FLOORS	TOTAL SAMPLES	SAMPLES EVALUATED	SAMPLES NOT EVALUATED	AVERAGE FOR EACH FLOOR
1	SECOND	6	5	1	0:14
2	THIRD	17	16	1	0:17
3	FIFTH	41	39	2	0:13
4	SEVENTH	44	42	2	0:13
5	EIGHTH	23	19	4	0:13
6	NINTH	7	7	0	0:13
7	TENTH	12	12	0	0:14

CHART 7 – AVERAGE TURN AROUND TIME FOR EACH FLOOR



ANALYSIS – As depicted in the above graph, Average Turnaround time for Third floor is the highest which is 17mins, followed by Second and Tenth floor which is 14mins and all the rest of the floors have 13mins of average turnaround time respectively.

CHART 8 – FISHBONE DIAGRAM EXPLAINING THE REASONS OF DELAY/NON-COMPLIANCE OF ASSESSMENT FORM

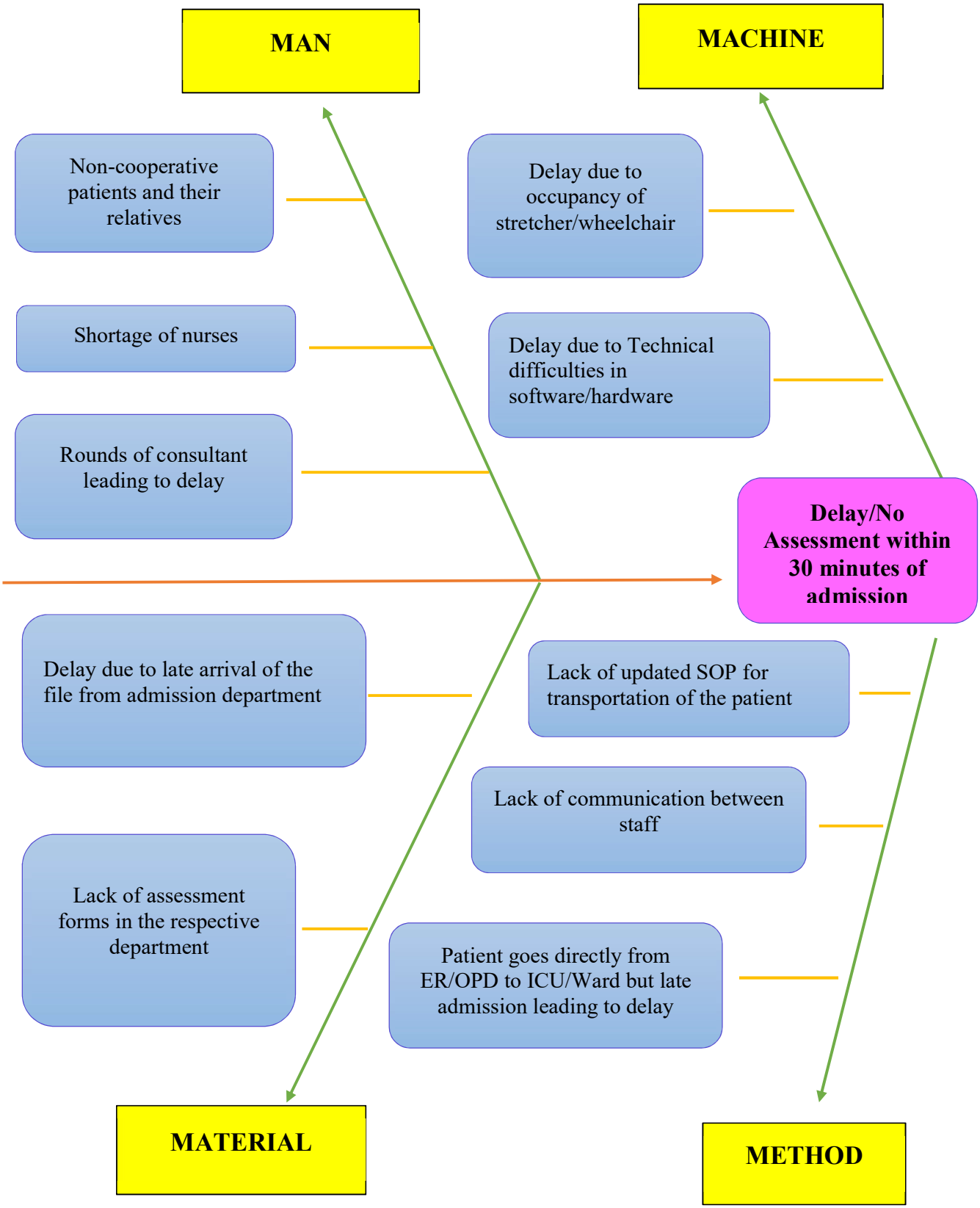
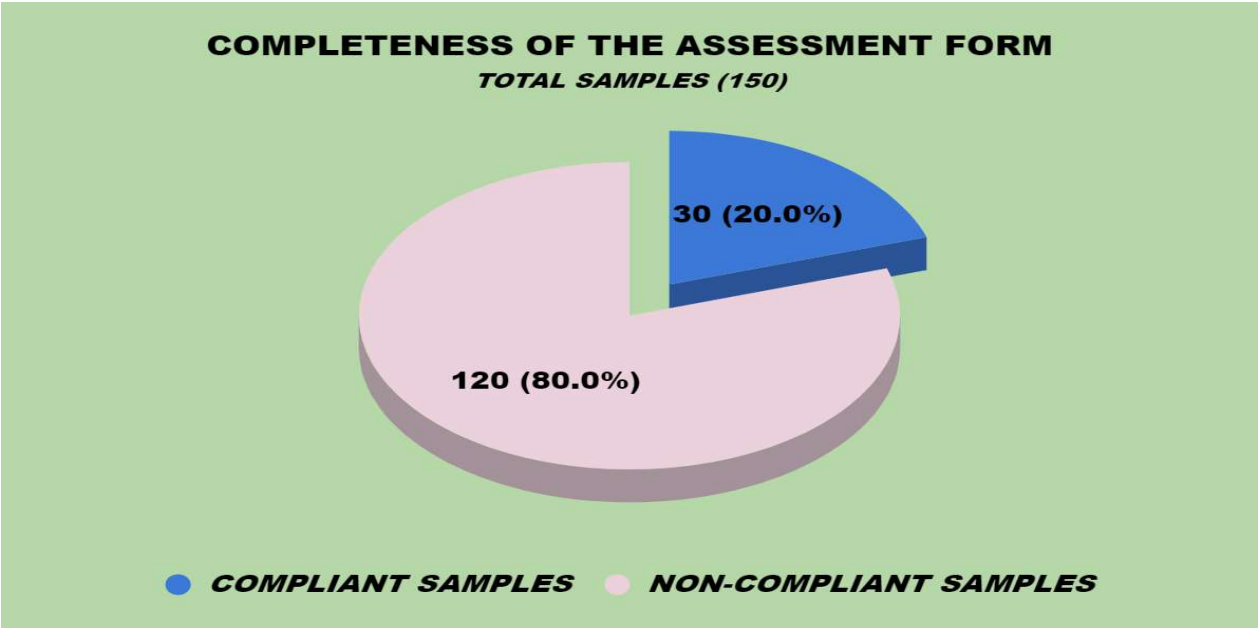


TABLE 6: COMPLETENESS OF THE ASSESSMENT FORM

COMPLETENESS	
COMPLIANCE	**NON-COMPLIANCE**
30	120

CHART 9 – COMPLETENESS OF THE ASSESSMENT FORM

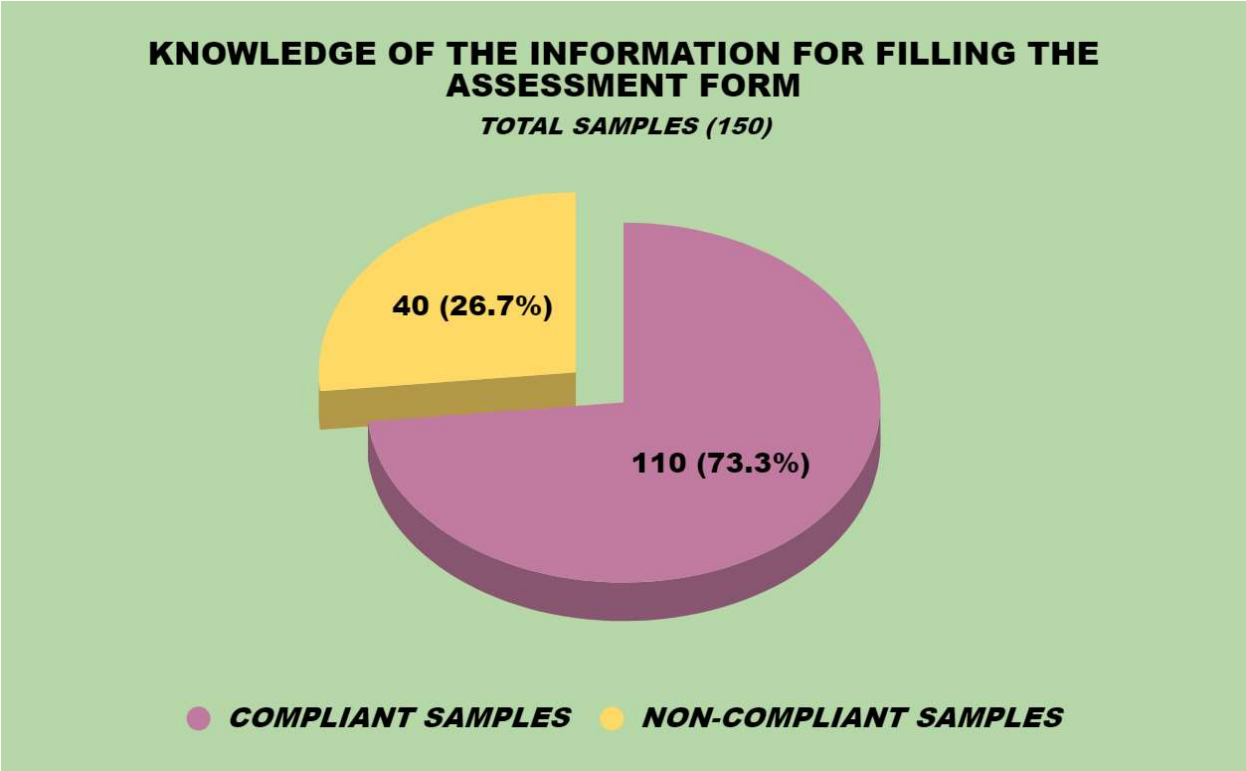


ANALYSIS – Above depicted table and graph shows one of the attributes of the assessment form which is completion of the form by the nursing staff during patient assessment. 30 samples (20% compliance) were totally complete and 120 samples were incomplete hence achieving 80% non-compliance out of the total 150 samples.

TABLE 7: KNOWLEDGE OF THE ASSESSMENT FORM

KNOWLEDGE	
COMPLIANCE	**NON-COMPLIANCE**
110	40

CHART 10 – KNOWLEDGE OF THE ASSESSMENT FORM

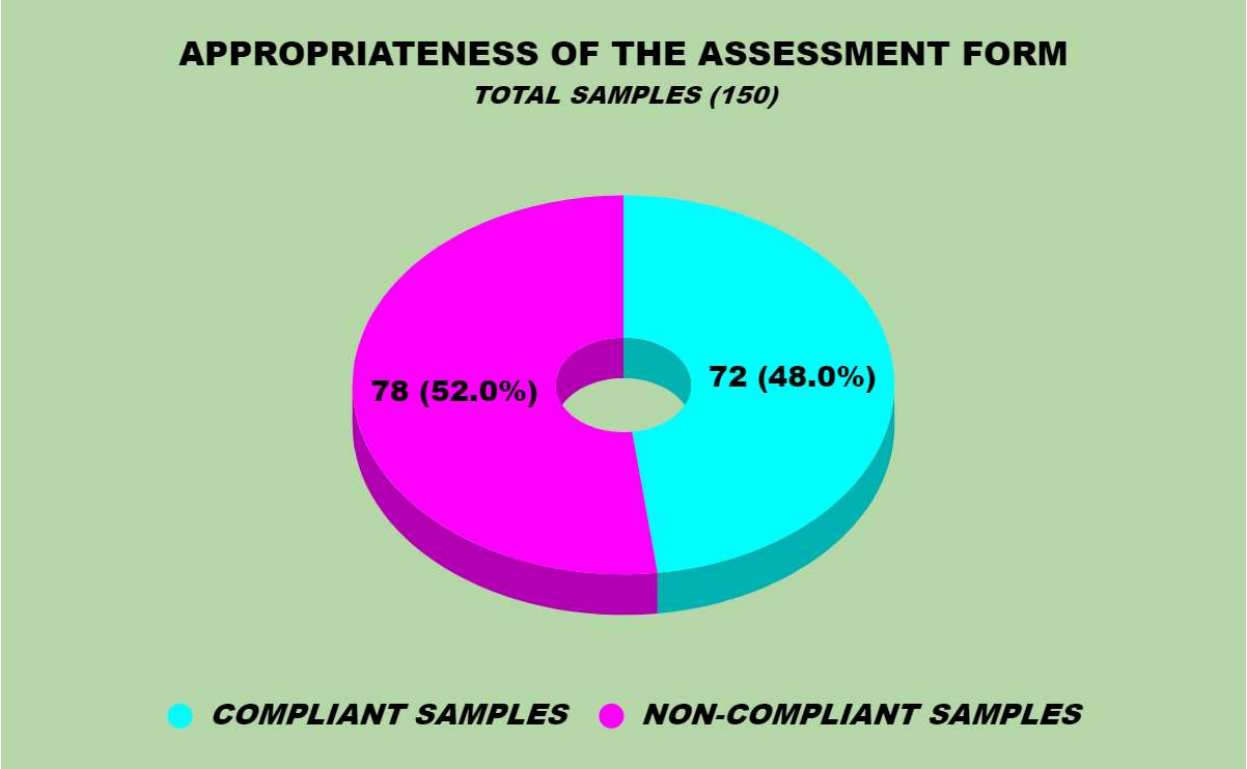


ANALYSIS - Above depicted table and graph shows the second attribute of the assessment form which is the knowledge of the nursing staff of assessment form during patient assessment. 110 samples (73.3%) compliance was achieved hence depicting proper knowledge of nursing staff for the assessment form and for the rest of the 40 samples (26.7%) non-compliance was achieved.

TABLE 8: APPROPRIATENESS OF THE ASSESSMENT FORM

APPROPRIATENESS	
COMPLIANCE	**NON-COMPLIANCE**
72	78

CHART 11 – APPROPRIATENESS OF THE ASSESSMENT FORM



ANALYSIS - Above depicted table and graph shows the third attribute of the assessment form which is the appropriateness in filling the assessment form during patient assessment. 72 samples (48%) compliance was achieved and for the rest of the 78 samples (52%) non-compliance was achieved.

TABLE 9: DETAILED ANALYSIS FOR DIFFERENT SECTIONS OF THE FORM

Detailed Analysis of the 150 samples of Initial Nursing Assessment Form with respect to Completeness, Knowledge, Appropriateness. Following are the most repeated observations made for each section in (not all, but some) samples as described below:

Particulars	Observations	Factors leading to observations
General Details	Height, Weight not written	Condition of the patient (unable to stand, unconscious, language barrier)
	Emergency contact number not written	Absence of relative to provide details, Emergency contact is needed in case of emergency decisions, hence it can be taken as and when possible from the relative
Vital Signs and Allergies	Allergies section empty	Improper taking of medical history, patient not able to advocate at that time due to medical reasons (unconsciousness, weakness etc.).Sometimes patient is not aware of his own allergies but it is important to know about all the allergies of the patient in order to provide proper treatment, diet and reduce anaphylactic shock
	Nutritional Screening not done	Dietitian rounds left or absence of any special diet requirements.
History	Family history, past medical history or existing disabilities/conditions not written	Absence of past medical records, in case of emergencies when patient rushed to ICU, RTA, sometimes patient is not aware of his own medical history, patient is not aware of his family history.
Activities of Daily Living	Correlation between the patient condition and assessment done would be completely different leading to documentation of false information	Lack of knowledge of the nursing staff, new joiners, medical condition of the patient, misinterpretation of the nursing staff for acknowledgement of the scale.

Particulars	Observations	Factors leading to observations
Vulnerability Assessment and Care of Plan	Correlation between the Care of plan and Vulnerability Assessment along with Activities of Daily Living would be completely different leading documentation of false information	Vulnerability assessment is one of the crucial aspects but misinterpretation, wrong interpretation of a condition, incomplete assessment, language barrier, lack of knowledge and proper understanding of the subject can lead to false documentation of information.
Examination	Correlation of patient condition to the Documentation of pain assessment done would be completely different leading to false information	Pain assessment is crucial for RTA, fractures, MIs etc. procedures but incomplete assessment can lead to false documentation of information which can occur due to lack of knowledge of Wong Baker Pain scale, unconscious patient.
Morse Fall score and GCS score	Grading according to level of Fall score, incomplete information or no information at all leading to false interpretation	Lack of knowledge about the Morse Fall score scale, Lack of experience leads to misinterpretation and therefore leading to false information in the form
Braden Scale	Grading according to scale for Bedsores, incomplete information or no information at all leading to false interpretation	Lack of knowledge about the Braden scale for bedsores, Lack of experience leads to misinterpretation and therefore leading to false information in the form
Nursing Care plan	Incomplete Information leading to incomplete assessment	Care plan yet not decided during assessment of the patient
Signatures	No Signatures of Primary Nurse and Nurse Administrator leading to failure of authentication of the whole assessment form.	Sometimes, Signatures of Primary Nurse are missing and cross-verification by Nurse Administrator is missing too because of reasons like work overload, shift changes, emergencies such as Code Blue, critical patients.

SUGGESTIONS AND RECOMMENDATIONS

- Increase the frequency of on-the-job training, training during induction of the new joinee staff can be implemented.
- Initial Assessment Form can be divided into sections for training by Nurse Educator in order to increase the effectiveness in the nursing staff.
- Cross-verification of the patient's real time situation with the details filled in assessment form by concerned Nursing Administrators of the respective floors can be amended in order to achieve better results.
- Braden scale for bedsores and Morse Fall scale can be printed alongside so that nursing staff can do proper assessment
- If the patient in any case is not able to advocate for himself, is disabled, unconscious etc. then relative/guardian of the patient to be asked for details such as Height, Weight, Emergency Contact Number, Medical History, Allergies etc.
- History can also be taken from past medical records with the help of Medical Officer.
- Vulnerability Assessment, Care of Plan, Braden scale, GCS score, Morse Fall score can determine nursing and medical care of the patient hence proper training should be conducted for its proper interpretation
- Nursing staff can spread awareness among themselves by discussing the assessment form among themselves and get their doubts cleared by Nurse Educator or Nurse Administrator
- A strict protocol can be implemented for completion of the assessment form, for an instance, if a patient has got admitted in the evening shift, then the night shift nursing staff before taking handover should demand for the completion of form.
- Proper scheduling of Nursing staff on duty in order to reduce the workload of patients.
- Updating of SOPs according to standards, quality of care and maintaining patient safety in mind
- Scheduling of tests in advance for radiology in order to avoid delay in the nursing assessment.

CONCLUSION

- Detailed Analysis of Initial Nursing Assessment Form gives us an insight about the process, its controllable and uncontrollable factors in a hospital environment.
- A fairly detailed analysis led to the findings that the turnaround time for the initial Nursing Assessment is fairly within the time duration which is 30 minutes of the admission.
- But, on further analysis, it can be observed that a delay is occurring in the assessment of the patient which can be avoided if proper steps are taken.
- Initial Nursing Assessment form is one of the most important assessment for a patient hence it should be done with utmost precision and efficiency in order to increase the quality of care and patient safety in a hospital.

LIMITATIONS OF THE STUDY

- Inclusion of samples for emergent patients in need of critical care cannot be done.
- COVID wards cannot be included in the study.
- Medico-legal cases are not included in the study.
- Day-care patients who later were transferred to ward/ICU (for observation if required) are not included in the study.

BIBLIOGRAPHY AND ANNEXURE

RESEARCH PAPERS AND ARTICLES

1. Fernández-Sola, C., Granero-Molina, J., Mollinedo-Mallea, J., Gonzales, MHPD, Aguilera-Manrique, G., & Ponce, ML (2012). Development and validation of an instrument for the initial nursing assessment. Revista da Escola de Enfermagem da USP, 46 (6), 1415-1422.
2. Rothman MJ, Solinger AB, Rothman SI, et al
   Clinical implications and validity of nursing assessments: a longitudinal measure of patient condition from analysis of the Electronic Medical Record
   BMJ Open 2012;2: e 000849. doi: 10.1136/bmjopen-2012-000849
3. Bernhart-Just, A., Lassen, B., & Schwendimann, R. (2010). Representing the nursing process with nursing terminologies in electronic medical record systems: a Swiss approach. CIN*:* Computers, informatics, nursing, 28(6), 345-352.
4. Laitinen, H., Kaunonen, M., & Åstedt-Kurki, P. (2010). Patient-focused nursing documentation expressed by nurses. Journal of clinical nursing, 19(3-4), 489-497.
5. Lees, L. (2010). Improving the quality of nursing documentation on an acute medicine unit. *Nursing times*, *106*(37), 22-26.
6. Mark, B. A., Harless, D. W., McCue, M., & Xu, Y. (2004). A longitudinal examination of hospital registered nurse staffing and quality of care. Health services research, 39(2), 279-300.
7. Lasater, K. B., Sloane, D. M., McHugh, M. D., Cimiotti, J. P., Riman, K. A., Martin, B., ... & Aiken, L. H. (2020). Evaluation of hospital nurse-to-patient staffing ratios and sepsis bundles on patient outcomes. American journal of infection control.
8. Chakravarty, A., Sajan, P., & Nambiar, B. C. (2017). A qualitative study to develop an instrument for initial nurse assessment. Medical Journal Armed Forces India, 73(3), 290-293.
9. Poletick, E. B., & Holly, C. (2010). A systematic review of nurses' inter-shift handoff reports in acute care hospitals. JBI Evidence Synthesis, 8(4), 121-172.
10. Needleman, J., Buerhaus, P., Mattke, S., Stewart, M., & Zelevinsky, K. (2002). Nurse-staffing levels and the quality of care in hospitals. New England Journal of Medicine, 346(22), 1715-1722.

11. Kane, R. L., Shamliyan, T. A., Mueller, C., Duval, S., & Wilt, T. J. (2007). The association of registered nurse staffing levels and patient outcomes: systematic review and meta-analysis. Medical care, 1195-1204.
12. https://doi.org/10.1111/j.1365-2648.2006.04084.x Ann E. Tourangeau et al., Journal of Advanced Nursing, 2006
13. Sasichay-Akkadechanunt, T., Scalzi, C. C., & Jawad, A. F. (2003). The relationship between nurse staffing and patient outcomes. JONA: The Journal of Nursing Administration, 33(9), 478-485.
14. Carmona-Monge, F. J., Rodríguez, G. M. R., Herranz, C. Q., Gómez, S. G., & Marín-Morales, D. (2013). Evaluation of the nursing workload through the Nine Equivalents for Nursing Manpower Use Scale and the Nursing Activities Score: a prospective correlation study. Intensive and Critical Care Nursing, 29(4), 228-233.
15. Burston, S., Chaboyer, W., & Gillespie, B. (2014). Nurse-sensitive indicators suitable to reflect nursing care quality: A review and discussion of issues. Journal of Clinical Nursing, 23(13-14), 1785-1795.

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Nursing Admission Assessment Form

INITIAL ASSESSMENT

(To be completed within 30 minutes of admission)

Addressograph

Form 23
NURSING

Check All That Apply

Date: _____ Time: _____ Unit: _____ Bed No.: _____

ID Band on: ☐ Yes ☐ No

Call Bell in reach : ☐ Yes ☐ No

Height _____(cm) Weight _____(kg)

Mode : ☐ Ambulatory ☐ Stretcher ☐ Wheel Chair

Admitted from : ☐ ER ☐ Admission Dept.

INFORMATION OBTAINED FROM :

☐ Patient ☐ Family

☐ Old Chart ☐ Other ☐ Consent

Given to Obtain Information From Family

WHOM TO CALL IN AN EMERGENCY :

_____

VITAL SIGNS

T _____ °F P _____/min R _____/min BP : LT _____

RT _____ mm of Hg SPO2 : _____ %

ALLERGIES : (DRUG / FOOD / OTHER)

Initial Assessment Start Time :

Initial Assessment End Time :

Nutritional Screening :

Action Taken :

Complete Admission Assessment (To be completed within 24 hours)

HISTORY

HISTORY / PAST MEDICAL TREATMENT OF THE PATIENT :

_____

_____

FAMILY HISTORY :

_____

_____

ACTIVITIES OF DAILY LIVING

INDICATE SKIN ASSESSMENT FINDING ON DIAGRAM

	Usual Level	Level on admission	Score
Feeding			Level 0 Independent, requires no supervision, assistance or teaching
Bathing			
Toileting			Level 1 Requires supervision and/or teaching
General Mobility / Gait			Level 2 Requires at least minimum assistance from another person
Dressing / Grooming			Level 3 Is dependent and does not participate

VULNERABILITY ASSESSMENT

VULNERABILITY FACTORS

Sr. No.	Category	Yes	No
1	Age More Than 65 Years / Ages less than 18 years		
2	Physically Challenged		
3	Mentally Challenged / Mentally Ill		
4	Terminally Ill		
5	Inability To Speak		
6	Altered Consciousness		
7	Epileptic Fit		
8	Medication Related Coraciousness Defect		
9	Absence Of Relative Attendant		
10	Immunocompromised / Low Immunity		
11			

CARE TO BE TAKEN

Sr. No.	Category	Check if required
1	Side Rails Provision	
2	Low Height Bed	
3	Nearer To Nursing Station	
4	Continuous Monitoring	
5	Light And Sound Modification	
6	Language Translator	
7	Full Time Attendant	
8	Double Checking of Identification	
9	Infection Control Precaution	
10	Others (Please Specify)	
11		

Vulnerability level (check whichever is applicable)

☐ High vulnerability: (If more than "1" category or factor is marked "yes")

☐ Low vulnerability: (If "1" category or factor is marked "yes")

Please Tick Mark applicable boxes.

Responsibility:-Primary Nurse.

HCGHMSNUR/023/R08

Significant General Examination :-

Systematic Examination :

PAIN ASSESSMENT

Pain ☐ Yes ☐ No	
Pain Location _____ Duration _____	Wong Baker Pain Scale:
Quality ☐ Constant ☐ Intermittent	Affects daily routine ☐ Yes ☐ No
Character ☐ Lacerating ☐ Burning ☐ Radiating	Sleep ☐ Yes ☐ No
Relieving Factors ☐ Rest ☐ Medication	Most likely causes of pain:
Other :	
Plans:	

TOTAL MORSE FALL SCORE Keep In Categories as follows:			BRADEN SCALE FOR PREDICTING PRESSURE ULCER RISK TOTAL SCORE: _____ Keep In Categories as follows:		
☐ 45 & higher	>	HIGH RISK	☐ 15 – 16	>	LOW RISK
☐ 25 – 44	>	MODERATE RISK	☐ 13 – 14	>	MODERATE RISK
☐ 0 - 23	>	LOW RISK	☐ 10 – 12	>	HIGH RISK
TOTAL GCS SCORE: _____ [The lowest GCS is 3 (deep coma or death), while the highest is 15(fully awake person)]			☐ 9 or below	>	VERY HIGH RISK

NURSING CARE PLAN

Nursing Diagnosis	Nursing Interventions
	Care Provided :- Monitoring :- Investigations : Medications : Expected Outcome :

Sign of Primary Nurse / Emp. ID

Cross Verified by Nurse Administrator / Emp. ID

Morse Fall Scale

(Adapted with permission, SAGE Publications)

The Morse Fall Scale (MFS) is a rapid and simple method of assessing a patient's likelihood of falling. A large majority of nurses (82.9%) rate the scale as "quick and easy to use," and 54% estimated that it took less than 3 minutes to rate a patient. It consists of six variables that are quick and easy to score, and it has been shown to have predictive validity and interrater reliability. The MFS is used widely in acute care settings, both in the hospital and long term care inpatient settings.

Item	***Scale***	***Scoring***
1. History of falling; immediate or within 3 months	No 0 Yes 25	_____
2. Secondary diagnosis	No 0 Yes 15	_____
3. Ambulatory aid Bed rest/nurse assist Crutches/cane/walker Furniture	0 15 30	_____
4. IV/Heparin Lock	No 0 Yes 20	_____
5. Gait/Transferring Normal/bedrest/immobile Weak Impaired	0 10 20	_____
6. Mental status Oriented to own ability Forgets limitations	0 15	_____

The items in the scale are scored as follows:

History of falling: This is scored as 25 if the patient has fallen during the present hospital admission or if there was an immediate history of physiological falls, such as from seizures or an impaired gait prior to admission. If the patient has not fallen, this is scored 0. Note: If a patient falls for the first time, then his or her score immediately increases by 25.

Secondary diagnosis: This is scored as 15 if more than one medical diagnosis is listed on the patient's chart; if not, score 0.

Ambulatory aids: This is scored as 0 if the patient walks without a walking aid (even if assisted by a nurse), uses a wheelchair, or is on a bed rest and does not get out of bed at all. If the patient uses crutches, a cane, or a walker, this item scores 15; if the patient ambulates clutching onto the furniture for support, score this item 30.

Intravenous therapy: This is scored as 20 if the patient has an intravenous apparatus or a heparin lock inserted; if not, score 0.

Gait: A *normal gait* is characterized by the patient walking with head erect, arms swinging freely at the side, and striding without hesitant. This gait scores 0. With a *weak gait* (score as 10), the patient is stooped but is able to lift the head while walking without losing balance. Steps are short and the patient may shuffle. With an impaired gait (score 20), the patient may have difficulty rising from the chair, attempting to get up by pushing on the arms of the chair/or by bouncing (i.e., by using several attempts to rise). The patient's head is down, and he or she watches the ground. Because the patient's balance is poor, the patient grasps onto the furniture, a support person, or a walking aid for support and cannot walk without this assistance.

Mental status: When using this Scale, mental status is measured by checking the patient's own self-assessment of his or her own ability to ambulate. Ask the patient, "Are you able to go the bathroom alone or do you need assistance?" If the patient's reply judging his or her own ability is consistent with the ambulatory order on the Kardex®, the patient is rated as "normal" and scored 0. If the patient's response is not consistent with the nursing orders or if the patient's response is unrealistic, then the patient is considered to overestimate his or her own abilities and to be forgetful of limitations and scored as 15.

Scoring and Risk Level: The score is then tallied and recorded on the patient's chart. Risk level and recommended actions (e.g. no interventions needed, standard fall prevention interventions, high risk prevention interventions) are then identified.

Important Note: The Morse Fall Scale should be calibrated for each particular healthcare setting or unit so that fall prevention strategies are targeted to those most at risk. In other words, risk cut off scores may be different depending on if you are using it in an acute care hospital, nursing home or rehabilitation facility. In addition, scales may be set differently between particular units within a given facility.

Sample Risk Level

Risk Level	MFS Score	Action
No Risk	0 - 24	Good Basic Nursing Care
Low Risk	25 - 50	Implement Standard Fall Prevention Interventions
High Risk	≥ 51	Implement High Risk Fall Prevention Interventions

BRADEN SCALE – For Predicting Pressure Sore Risk

SEVERE RISK: Total score ≤ 9 **HIGH RISK**: Total score 10-12
MODERATE RISK: Total score 13-14 **MILD RISK**: Total score 15-18

RISK FACTOR	SCORE/DESCRIPTION				DATE OF ASSESS ➡			
					1	2	3	4
SENSORY PERCEPTION Ability to respond meaningfully to pressure-related discomfort	**1. COMPLETELY LIMITED** – Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation, **OR** limited ability to feel pain over most of body surface.	**2. VERY LIMITED** – Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness, **OR** has a sensory impairment which limits the ability to feel pain or discomfort over ½ of body.	**3. SLIGHTLY LIMITED** – Responds to verbal commands but cannot always communicate discomfort or need to be turned, **OR** has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	4. **NO IMPAIRMENT** – Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.				
MOISTURE Degree to which skin is exposed to moisture	1. **CONSTANTLY MOIST**– Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	2. **OFTEN MOIST** – Skin is often but not always moist. Linen must be changed at least once a shift.	3. **OCCASIONALLY MOIST** – Skin is occasionally moist, requiring an extra linen change approximately once a day.	4. **RARELY MOIST** – Skin is usually dry; linen only requires changing at routine intervals.				
ACTIVITY Degree of physical activity	1. **BEDFAST** – Confined to bed.	2. **CHAIRFAST** – Ability to walk severely limited or nonexistent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	3. **WALKS OCCASIONALLY** – Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	4. **WALKS FREQUENTLY**– Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.				
MOBILITY Ability to change and control body position	1. **COMPLETELY IMMOBILE** – Does not make even slight changes in body or extremity position without assistance.	2. **VERY LIMITED** – Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	3. **SLIGHTLY LIMITED** – Makes frequent though slight changes in body or extremity position independently.	4. **NO LIMITATIONS** – Makes major and frequent changes in position without assistance.				
NUTRITION Usual food intake pattern [1]NPO: Nothing by mouth. [2]IV: Intravenously. [3]TPN: Total parenteral nutrition.	**1. VERY POOR** – Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement, **OR** is NPO[1] and/or maintained on clear liquids or IV[2] for more than 5 days.	**2. PROBABLY INADEQUATE** – Rarely eats a complete meal and generally eats only about ½ of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement **OR** receives less than optimum amount of liquid diet or tube feeding.	**3. ADEQUATE** – Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally refuses a meal, but will usually take a supplement if offered, **OR** is on a tube feeding or TPN[3] regimen, which probably meets most of nutritional needs.	4. **EXCELLENT** – Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.				
FRICTION AND SHEAR	1. **PROBLEM**- Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures, or agitation leads to almost constant friction.	2. **POTENTIAL PROBLEM**– Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.	3. **NO APPARENT PROBLEM** – Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair at all times.					
TOTAL SCORE	**Total score of 12 or less represents HIGH RISK**							

ASSESS	DATE	EVALUATOR SIGNATURE/TITLE	ASSESS.	DATE	EVALUATOR SIGNATURE/TITLE
1	/ /		3	/ /	
2	/ /		4	/ /	

NAME-Last	First	Middle	Attending Physician	Record No.	Room/Bed