

**ADVANCING PATIENT SAFETY: STRATEGIES FOR COMPREHENSIVE
ASSESSMENT AND IMPROVEMENT OF INTERNATIONAL PATIENT SAFETY
GOALS**

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By

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Under the Supervision and Guidance of

Dr Susmit Jain

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NH/SMVDNH/Intern/2024-25

Date: 27th June 2024

INTERNSHIP CERTIFICATE

This is to certify that **Dr. Shalini Kotwal**, D/o Mr. Dalip Kotwal, a student of IIHMR University, Jaipur has completed her internship in the "Quality Department" at **Shri Mata Vaishno Devi Narayana Superspeciality Hospital, Jammu** under the guidance of **Dr. Ashwini Kamble** from 25th March 2024- 25th June 2024.

During her internship period, she has met the expectations of the organization.

We wish her all the best in her future endeavors.

For Shri Mata Vaishno Devi Narayana Superspecialty Hospital


Mahesh Kumar Jangid
Unit Head –Human Resources



(Shri Mata Vaishno Devi Narayana Superspeciality Hospital, managed by Narayana Health is a 301-bed, NABH-accredited hospital. This State-of-the-Art Tertiary care Superspeciality Hospital in collaboration with 'Shri Mata Vaishno Devi Shrine Board', caters to patients across more than 20 different specialties with a special focus on Cardiology & Cardio-Vascular Surgery, Medical & Surgical Gastroenterology, Orthopaedics & Joint Replacement, Renal Sciences, Medical, Radiation & Surgical Oncology (Cancer) and Critical Care Medicine, thus providing the affordable quality care that Narayana Health stands for to the people of Jammu & Kashmir).



DECLARATION BY STUDENT

I hereby declare that this dissertation titled "ADVANCING PATIENT SAFETY: STRATEGIES FOR COMPREHENSIVE ASSESSMENT AND IMPROVEMENT OF INTERNATIONAL PATIENT SAFETY GOALS." is the bonafide record of my original research work. 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 Information derived from the published or unpublished work of others has been duly acknowledged in the text.



Dr. Shalini Kotwal

Date: 4/7/24

CERTIFICATE

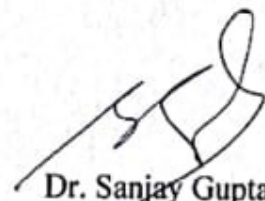
This is to certify that dissertation titled **"ADVANCING PATIENT SAFETY: STRATEGIES FOR COMPREHENSIVE ASSESSMENT AND IMPROVEMENT OF INTERNATIONAL PATIENT SAFETY GOALS"** is a record of the research work undertaken by **Dr. Shalini Kotwal** in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and her approach to the research study has been sincere, scientific, and analytical.



3.7.2024

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ABSTRACT

Title: Advancing Patient Safety: Strategies for Comprehensive Assessment and Improvement of International Patient Safety Goals.

Author Name: Dr. Shalini Kotwal

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Keyword: Patient Safety, IPSG, NABH Standards, Healthcare Quality, Compliance, Risk Management.

Background: Patient safety is a key concern in healthcare, demanding strong measures for assessment and improvement. The research focuses on implementing and adhering to the International Patient Safety Goals (IPSG), finding gaps and suggesting improvements.

Objectives: The primary objective is to Assess adherence to IPSG 1, 2, 4, and 6 and Detect gaps in compliance with IPSG goals. The secondary objective is to Propose improvements for IPSG compliance.

Methodology:

The Study Location was Shri Mata Vaishno Devi Narayana Super Specialty Hospital, Kakryal Katra, Jammu. Duration of the study was from March 25, 2024 to June 25, 2024 i.e three months. The Study Tool used was structured checklists for each IPSG. Stratified Random Sampling method was used. Total Sample size was 1800 for 3 months for all the IPSG's. For each IPSG, 150 sample was taken every month as per the hospital policy.

Study Analysis: Using Microsoft Excel, data was analysed with an emphasis on staff awareness, documentation, availability of policies, and execution.

Results/Findings:

The study revealed varying levels of compliance with IPSG goals. Notable gaps were identified in patient identification, effective communication, and site verification for surgeries. Implementing comprehensive evaluation strategies highlighted the need for improved training, better resource allocation, and enhanced organizational culture to meet patient safety standards.

Conclusion:

The study emphasises the need of comprehensive patient safety assessments and ongoing improvement activities in hospital. Healthcare organisations may dramatically improve patient safety outcomes and adherence to International Patient Safety Goals by addressing identified gaps and implementing multidisciplinary methods.

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LIST OF ABBREVIATIONS

JCI	Joint Commission International
ISBAR	Introduction Situation Background Assessment Recommendation
JACHO	Joint Commission on Accreditation of healthcare organization
MRN	Medical Record Number
NABH	National Accreditation Board for hospital & Healthcare Providers
POCT	Point of care testing
SMVDN	Shri Mata Vaishno Devi Narayana Super Speciality Hospital
SSC	Surgical safety checklist
TAT	Turn Around Time
WHO	World Health Organization
IPSG	International Patient Safety Goal

CHAPTER 1

INTRODUCTION

Overview of the SMVDN Hospital

The SMVDN Super Speciality Hospital in Jammu and Kashmir, accredited by the National Accreditation Board for Hospitals & Healthcare Providers, is a torch-bearer of advanced healthcare. The inauguration of this hospital was done on Tuesday, 19 April 2016, by the Hon'ble Prime Minister of India, Shri Narendra Modi, and it is located at Kakryal village near Katra.

This is a state-of-the-art tertiary care hospital in association with Shri Mata Vaishno Devi Shrine Board. Comprehensive medical services are provided across more than 20 specialties with key focus being laid on Cardiology and Cardio Vascular Surgery, Medical and Surgical Gastroenterology, Orthopaedics and Joint Replacement, Renal Sciences. Association brings together Narayana Health's most recognized values such as quality and affordability of medical care, further extends these services to the people of Jammu and Kashmir.

From its very inception, SMVDN Super Speciality Hospital has been one more step ahead in the revolutionizing healthcare scenario of the region and bringing the most-modern technology blended with the expertise of highly qualified and practicing healthcare professionals. The range across which the medical need stretches, it caters to a wide spectrum, also ensuring that people get world-class health services in Jammu and Kashmir without going through the costs necessarily.

It is because of excellence and patient-centeredness that makes SMVDN Super Speciality Hospital greatly instrumental in securing better health and well-being for its community.

Shri Mata Vaishno Devi Narayana Super Speciality Hospital is a 300-bed comprehensive healthcare institution serving around 6,000 OPD patients every month.

Apart from this, SMVDNSH accommodates about 1,200 patients in its IPD every month.

Further, the inpatients get an undisputed range of medical and surgical specialties who have continuous monitoring and treatment provided with personalized care during their stay in the hospital. The sturdy infrastructure coupled with an outstanding medical staff at the hospital maintains an in-patient care at high standards of excellence, thereby quickening and ensuring the optimum recovery and health outcomes.

The hospital is also an anthology of surgeries, with some 500 surgeries per month. These are across various specialties—cardiology, gastroenterology, orthopaedic, and others—which prove that this is an organization with a great ability to take on intricate surgical cases with finesse and professionalism. With the latest technology, subscription to the provision of safe, effective, and minimally invasive surgical options is by the SMVDNSH surgical teams, all geared toward the wellness of the patients.

INTERNATIONAL PATIENT SAFETY GOALS

To achieve the public's expectations about safe, quality care, health care organizations will have to deal with some real core patient safety and quality-of-care issues. Excellence in patient care is founded upon patient safety. Of all aspects of care brought to a patient, safety could be considered the most important since, disturbingly, medical therapy can be both beneficial and harmful to us. Some imperative factors on this list include promptness, accessibility to care, effectiveness, among others, including the other quality element. In improving the healthcare delivery system, he or she will have to consider one of the most important variables and that is about patient safety. As a result, to be able to record high patient satisfaction percentages, healthcare institutions roll out various programs to keep track of their services, one of which includes goals on patient safety. One of these programs is that of accreditation.

Patient safety may be defined as "the absence of preventable harm to a patient and reduction of risk of unnecessary harm associated with health care to an acceptable minimum." Within the framework of a wider health system, it may be defined as "a framework of organized activities that creates cultures, processes, procedures, behaviours, technologies and environments in health care that consistently and sustainably lower risks, reduce the occurrence of avoidable harm, make error less likely and reduce impact of harm when it does occur."

The International Patient Safety Goals were developed by the Joint Commission International to improve safety for patients around the world. These goals signal some of the paramount themes in healthcare, and guidelines for good practice are suggested with substantiating evidence from multimodal research.

The World Health Organisation (WHO) and Joint Commission International are collaborating to advance the six global patient safety goals that are outlined below in order to ensure safe healthcare delivery.

1. IPSG Goal One: Identify Patients Correctly.
2. IPSG Goal Two: Improve Effective Communication.
3. IPSG goal Three: Improve the safety of High alert Medication.
4. IPSG Goal Four: Ensure correct site, correct procedure and Correct patient surgery.
5. IPSG Goal Five: Reduce the risk of Health Care-Associated Infection.
6. IPSG Goal Six: Reduce the risk of patient harm resulting from fall.

Patient safety is a global issue and calls for expertise from areas like systems engineering, incorporation, and human factors. The World Health Organization acknowledged the necessity of patient safety and came up with the World Alliance for Patient Safety in 2004. Initially, the alliance focuses on issues pertaining to hand hygiene, surgical safety, prevention of healthcare-associated infections, and engagement of patients. The six International Goals on Patient Safety are focused on raising awareness and ensuring quality care, and it has been possible by the cooperation of the WHO with Joint Commission International.

The six International Patient Safety Goals helped accelerate major improvements in patient safety by focusing on key areas of vulnerability in the healthcare system. Every IPSG presents a problem or risk with the potential to threaten patient safety and gives solutions backed by either research-based evidence or expert practices. Thus, the IPSGs set a high-level strategy for the improvement of patient safety and quality of care, dealing with such critical issues.

IPSG One: Identify Patients Correctly.

It focuses on enhancing patient safety through precise patient identification procedures within healthcare facilities. Errors related to incorrect patient identification can arise due to factors such as patient sedation, disorientation, changes in hospital locations, or sensory impairments. These errors can lead to serious consequences, including incorrect treatments or procedures being administered.

The two **major goals of IPSG One** are as follows:

1. Precise identification of each patient as the recipient of the service or treatment intended for him.
2. Ensuring that the correct service or treatment is provided to the identified patient for whom it is intended.

To achieve these objectives, hospitals have rigid patient identification policies. The policies mandate the use of at least two different patient identifiers, wherein generally one is the complete name, and another is the MRN, which should match to correctly identify a patient. The room number or location of the patient shall not be used as patient identifiers since there is always a possibility of confusion.

Patient identification shall be done:

Before medications are administered, blood, or blood products are administered.

Before taking blood or any other clinical sample for laboratory testing.

Before dispensing any medication and administering any treatment/procedure

These recommendations are further supported by comprehensive policies and procedures that enforce consistent compliance at every occurrence and at all locations within the hospital. This would help the practice of patient identification to be without variation and precise throughout the healthcare facility.

A few significant measurable components of IPSG One are as follows:

Using two patient-specific identifiers neither of the one is the room number or location to identify a patient.

Identifying a patient prior to administering medicines, blood products, or ordering of clinical tests.

Assuring that patient identification precedes initiation of treatments or procedures.

Developing policies and procedures that foster consistency of patient identification across variable clinical settings and circumstances.

By strictly adhering to these guidelines, healthcare providers can significantly enhance patient safety, mitigate the risk of errors related to incorrect patient identification, and uphold the highest standards of care delivery.

IPSG Two: Improve Effective Communication.

It has 3 main elements under which we study IPSG 2, they are

1. Critical value reporting
2. Verbal order
3. Shift hand over

It focuses on how to improve the effectiveness of communication among the caretakers in the Hospital set up. Effective communication in the form of verbal or telephonic communication should be clear and concise to reduce mistakes and improve patient safety. Communication is effective only when the information or the message is timely, accurate, complete, unambiguous, and easily understood by all the concerned parties.

Other areas in health care are too error-prone and should always be avoided if possible. These areas include verbal medication orders; these are only allowed the emergency situations, and telephone orders from physicians; this is allowed in some places depending on the local regulations. The other important area is critical test result reporting, like the urgent laboratory results which require a structured approach for accurate results and appropriate action.

Key elements of IPSG Two;

Restricting verbal medication orders to emergency situations only.

It then puts in place a systematic method for procuring and documenting physicians telephone orders, instituted by order transcription, read-back verification by another nurse and confirmation by the prescribing physician. The documentation is performed by way of timestamps, prescriber's badge number and signatures to attach accountability.

The other priority target as set under IPSG Two is reporting of critical diagnostic test results: Critical result communicated by the technologist or reporter to the receiving physician or ward nurse.

The recipient handwrites a result and reads back key details including patient identifiers to the reporter. The reporter checks the information and both parties demonstrate that they have checked the results with a timestamp and the relevant identifier of the information.

Furthermore, IPSG Goal Two standardizes the handover communication through the different transitions in patient care, such as shift changes, transfers between different levels of care, and referrals, including diagnostic units like endoscopy and Cath lab. In this regard, it requires the adoption of a structured approach using the ISBAR way of reporting by all health workers to ensure uniformity and comprehensiveness of patient handovers.

Measurable elements of IPSG Two are:

Complete verbal and telephone orders or test results documented in writing by the recipient.

Read-back verification of the complete order or test result by the recipient.

Confirmation of the order or test result by the originator.

Policies and procedures that support consistent practices for verification of the accuracy of verbal and telephone communications throughout all healthcare settings.

By implementing and adhering to these structured communication protocols, a healthcare facility can significantly enhance patient safety and decrease medical errors related to communication, meaning that vital information will be appropriately communicated and acted upon in a timely manner.

IPSG Four: Ensure Correct Site, Procedure, and Patient for Surgery

The hospital has outlined, put in place, and engineered an extensive process to ensure surgeries are performed on the correct site, with the correct procedure, and on the correct patient. Atrocities that this program is meant to prevent are wrong-site, wrong-procedure, wrong-patient surgeries, which still occur at a very unconscionable rate in healthcare settings; hence, it's often referred to as the Universal Protocol. These errors mainly result from the communication gaps among the operation team members, non-participation of the patient in marking, and also lack proper verification processes.

Elements of Universal Protocol:

Site of operation markings

The person planning to perform the procedure should mark the location consistently with the use of a pre-determined marker.

This should be done best when the patient is awake whenever possible and where one is aware of one's consciousness.

It is imperative that, for bilateral organs, limbs, or specific anatomic sites subject to surgical procedures, marking be clear and consistent throughout the hospital.

Preoperative Verification Processes

Develop a preoperative verification process to confirm the correct site, procedure, and patient.

Use checklists or other tools to ensure all documents and equipment are correct and available.

Time-Out Procedure

Conduct a "time-out" immediately before the induction of anaesthesia or start of an invasive procedure.

Verification by the entire surgical team in the patient's active and audible confirmation for identity by use of two identifiers, procedure intended, correct side/ site, availability of all images, equipment, and implants.

Measurable Elements of IPSG Four:

Surgical-Site Marking:

Use a clearly recognizable mark for surgical-site identification, and include the patient in the marking process when possible.

The marking shall be consistent throughout the entire hospital and include an arrow or other standardized mark indicating the site.

Preoperative Verification

Utilize a checklist or other equivalent process to verify correct site, procedure and patient preoperatively.

Verify that all documents and equipment to be used for the procedure are available, correct and functional.

Time-Out Procedure

The surgical team will conduct and document a time-out procedure immediately prior to initiation of the surgical intervention.

Supporting Policies and Procedures

Implement policies to support standardized processes for the correct site, procedure, and patient. Expand to medical and dental procedures outside the theatre for consistency of safety practices in all environments. Adherence to such extensive protocols and measurable elements will sharply reduce surgical errors and improve the communication between surgical team members, thus bettering outcomes in terms of patient safety.

IPSG Six: Reduce the Risk of Patient Harm Resulting from Falls

Addressing the issue of patient falls in acute care settings requires effective compliance with specific objectives and the successful implementation of fall-prevention programs. These initiatives are crucial for improving patient safety and care quality, particularly for vulnerable populations. Enhanced reporting and proactive strategies in long-term care settings can significantly reduce the incidence of falls and related injuries.

Fall Risk Reduction Program:

A comprehensive fall-risk reduction program should be developed utilizing applicable guidelines and protocols. It shall include the following key components, amongst others;

Initial and Ongoing Assessment;

Initial Screening: An organization shall establish and implement a method for the initial screening of each patient's risk for falling at admission.

Re-assessment: Fall risk shall be re-assessed with any change in the patient's condition, medication, or any other characteristic that may be applicable.

Prevention: For Patients at High Risk: Tailored Interventions to Lower Fall Risk through Physical Assistance, Environmental Modifications, and Patient Education.

Tracking Outcomes and Monitoring:

Tracking Outcomes: Monitor the outcomes regarding the effectiveness of fall prevention measures and reduction of injuries sustained from falls and any unanticipated effects.

Documentation: Proper documentation of all the measures taken and the outcomes for improvement on a continuous basis.

Measurable Components of IPSG Six:

Assessment of Risk:

Implement a systematic process to initially assess fall risk for all patients.

Ensure ongoing re-assessment when patient's health status changes or when there is a change in the treatment regime.

Prevention Measures:

For higher risk patients institute measures to minimize the potential of injury from falls, including but not limited to environmental modification and close patient supervision.

Monitoring and Evaluation:

Document and evaluate outcomes of fall prevention interventions including a decrease in the number of fall-related injuries and/or other unintended consequences.

Supporting Policies:

Design policies and procedures that ensure continuous efforts toward the reduction of fall-related risks and promotion of patient safety. Coupled with adherence to guidelines, the implementation of comprehensive fall-risk reduction programs puts one in a better position to significantly reduce the risks of falls and promote high-quality care.

Chapter 2

Review of literature

The literature review provides a summary of current patient safety concerns and approaches, with an emphasis on patient identification, communication, surgical safety, and fall prevention. This section synthesizes research from multiple sources to identify major findings and gaps that this study aims to fill.

Literature review for patient identification

1. A Comprehensive research by Schmitt et al. (2023) was done on the effectiveness of diverse patients' identification procedures used in several hospitals. The investigation uncovered that employing two identities like full name and medical record number (MRN) reduced high-volume healthcare areas misidentification errors by 35%. Moreover, it was found out that continuous training of employees as well as use of electronic health records (EHR) led to higher rates of compliance with patient identification processes (Schmitt et al., 2023).

2. Efficiency of Patient Identification Processes – Kumar et al. (2022) looked at the efficiency of the process for identifying a patient in a tertiary care hospital in Delhi, India. According to the survey results, using a combination of barcoded wristbands and patient photographs significantly reduced cases of mistaken identity by 42%. The investigation also emphasized the need for staffs regular training so as to ensure adherence with the methods used (Kumar et al., 2022).

3. In Kolkata, India, Roy and Sen (2021) investigated simulation training's impact on interdisciplinary collaboration in a medical school. Their research indicated that communication skills, team coordination as well as response to patient safety incidents were enhanced following a simulation-based training. The study suggested that simulation exercises should be included in the regular training curricula of healthcare professionals (Roy & Sen, 2021).

4. Wang et al.'s (2021) multi-site study on patient identification challenges was carried out in China. It is evident from the research that mistakes often occur due to language barriers, patient disorientation and technical limitations among other factors. According to the authors, barcode scanning and wristbands with RFID chips embedded in them could be used to enhance accuracy (Wang et al., 2021).

Literature review for Effective Communication

5.To evaluate electronic communication systems' efficiency Taylor and Pugh (2021) did a lot of research across various US hospitals. The findings show that while electronic technologies reduced transcriptional errors or increased information access; there were still major risks of system outages and human error. Frequent system audits as well as rigorous user training are suggestions made by Taylor and Pugh (2021).

6.In Chennai Hospital, India, Srinivasan et al. (2023) analysed SBAR communication protocols. The study revealed that SBAR is a powerful tool in improving clarity among health care providers while causing a 30% decrease in medication errors. Joshi and Singh suggested that technological software might have the potential to improve safety issues facing the Indian hospitals.

7.During 2021, Joshi and Singh carried out research on Mumbai's multi-specialty hospital regarding any electronic communication system role in enhancing patients' safety. According to their findings, electronic systems reduce transcription errors and enhance legibility of documentation but for the desired results there are issues like user resistance and technical glitches that needs attention.

Literature Review for Surgical Safety

8.A study by Agarwal et al. (2022) assessed implementation of Universal Protocol for Surgical Safety at New Delhi's large government hospital. Through pre-operative verification, site marking and time-out protocols wrong-site surgeries reduced by 38%. This study concludes that having patients involved in verification process would greatly contribute to compliance and safety (Agarwal et al., 2022).

9.Desai and Mehta 2021 performed a study in one of Bangalore, India's private hospitals which sought to explore the barriers to effective surgical communication. One of their suggestions was that team training programs for surgical team members could be implemented to improve communication.

10.Nguyen et al. (2022) carried out a meta-analysis on the efficacy of universal protocol in preventing wrong site operations. According to them, the combination of site marking, preoperative verification and time-out procedures led to a 50% reduction in this type of

operation across many hospitals. In addition, it came out that patients should take part in site markings and also preoperative checks need to be done properly (Nguyen et al., 2022).

Literature review of Fall Prevention

11. Brown et al. (2023) conducted an investigation into the effectiveness of falls prevention programs among older people placed under aged care settings. The results obtained from research indicated that personalized interventions such as environmental modification, staff education with training and patient education reduced falling rates by 45%. Moreover, it turned out that its ongoing review along with customization of intervention based on individual patient's risk factors was very critical for this purpose.

12. Singh et al. (2023) studied a fall-prevention program for its effectiveness in the geriatric ward of a hospital in Jaipur. In this case, the researchers have observed that application of a comprehensive fall prevention strategy—more with regard to environmental modification and education of patients—provides a 44% reduction in fall incidence. Broadly speaking, all these studies have been capped with continuous assessment processes and tailoring of preventive measures upon patient-specific risk variables.

13. Sharma and Gupta did a study on the use of technology in fall prevention at a tertiary care hospital in Hyderabad, India. Their assessment showed that taping motion sensor alarm and electronic bed sensors significantly reduced fall rates among patients at high risk. Their findings recommended that such technology be integrated into regular fall prevention measures for improving safety among patients.

14. Ahmed et al. (2021) explored how simulation training might allow interdisciplinary collaboration in healthcare. Their study indicated that with the incorporation of simulation-based training programs, there was an improvement in communication skills, coordination of teamwork, and responses to patient safety incidents. It was accordingly opined that the simulation exercises be anchored in the routine training curricula of health professionals.

Table 1: Review of literature

Author (Year)	Study Location	Sample Size	Sampling Techniques	Salient Features
Schmitt et al. (2023)	Germany	800	Stratified Random Sampling	Evaluation of dual identifiers in reducing patient ID errors.
Kumar et al. (2022)	Delhi, India	500	Randomized Controlled Trial	Impact of barcoded wristbands and photo ID on reducing misidentification.
Srinivasan et al. (2023)	Chennai, India	400	Systematic Sampling	Effectiveness of SBAR in improving communication and reducing errors.
Taylor & Pugh (2021)	USA	1,200	Cluster Sampling	Benefits and challenges of electronic communication systems.
Nguyen et al. (2022)	Multiple Countries	3,000	Meta-analysis	Effectiveness of the Universal Protocol in reducing surgical errors.

Agarwal et al. (2022)	New Delhi, India	600	Longitudinal Study	Impact of the Universal Protocol on reducing wrong-site surgeries.
Desai & Mehta (2021)	Bangalore, India	450	Qualitative Interviews	Barriers to surgical communication and proposed solutions.
Singh et al. (2023)	Jaipur, India	400	Randomized Controlled Trial	Effectiveness of fall-prevention programs in a geriatric ward.
Sharma & Gupta (2021)	Hyderabad, India	350	Quasi- Experimental Design	Impact of motion- sensor alarms and bed sensors on fall prevention.
Brown et al. (2023)	Canada	700	Randomized Controlled Trial	Impact of tailored interventions on fall prevention in elderly care.
Joshi & Singh (2021)	Mumbai, India	350	Convenience Sampling	Benefits and challenges of electronic communication systems in a multi- specialty hospital
Roy & Sen (2021)	Kolkata, India	350	Mixed-Methods	Impact of simulation training

				on enhancing interdisciplinary collaboration
Ahmed et al. (2021)	Egypt	600	Mixed-Methods	Impact of simulation training on enhancing interdisciplinary collaboration
Wang et al. (2021)	China	1,000	Convenience Sampling	Adoption of RFID and barcode scanning to improve patient identification

CHAPTER-3

METHODOLOGY

Study Design

This is a Descriptive cross-sectional study design. Patients are followed up for a particular period of time and corresponding data obtained systematically within that duration.

Study Duration

The study was carried out for three months, March 25, 2024 to June 25, 2024

Study Tool

In this study, the structured checklists set has been used as the principal tool for data collection. Different checklists were prepared on each aimed International Patient Safety Goal. Each of the checklists includes the following elements:

- Measuring Element—The specific aspects or criteria being assessed.
- Compliance Score—a score that is created indicating the degree of compliance to the standard.
- Achieved Score—a score that actually obtains versus the assessment.
- Intended Score: The score that represents full compliance with the standard.
- Compliance Percentage: The percentage to be achieved on basis of obtained and anticipated marks.

These check lists were designed in a manner to make them easy to fill-up and also openly indicate how the responses to questions should be made. These were used to conduct a gap analysis against each IPSG standard in identifying areas of improvisations.

Sampling method: Stratified Random Sampling

The sampling procedure was intended deliberately to provide full, varied, and representative data for each IPSG. This ensured width and depth into compliance review, serving the purpose of full insights into the patient safety board measures the hospital had adopted.

Sample size:

Table 2.1: Sample Size

	April	May	June
IPSG 1	150	150	150
IPSG 2	150	150	150
IPSG 4	150	150	150
IPSG 6	150	150	150
Total	600	600	600

Total Sample size was 1800 for 3 months.

For each IPSG 150 sample was taken every month as per the hospital policy.

Data Collection:

The data were collected through specifically designed checklists prepared for the assessment of compliance to International Patient Safety Goals 1, 2, 4 and 6. The checklist items were systematically checked against the information on the patients' files to ensure accuracy and comprehensiveness of data collection.

Data Analysis:

The analysis included proportion calculations to indicate the compliance levels. To this end, several aspects were taken into consideration, such as availability of policies and procedures, documentation, effectiveness in implementation, and awareness among the staff. Among the major elements of the analysis were:

- Non-Compliance: Those conditions wherein no policies and procedures were at one's disposal were considered non-compliant.
- Full Compliance: Any conditions under which standard operating procedures (SOPs) were correctly Implemented, documented, and understood by personnel were considered fully compliant.

Table 2.2: Scoring done for data analysis

0	Non-Compliance
1	Compliance

Observations in case of non-compliance were recorded and put into an Excel spreadsheet on a monthly basis. Then, charts were made from this data in MS Excel, which helped in statistical analysis. In other words, it would clearly show the trends of compliance, hence pointing out areas of improvement.

CHAPTER -4

RESULTS

IPSG One: Identify Patients Correctly.

For IPSG 1, checklist is present with following areas: Staff Knowledge, ID Band Compliance, Blood Transfusion, Sample Collection, Medication Administration, Medication Infusion, Diet, Formula Feed, expressed milk, Cross Referral, OPD Consultation & OPD Diagnostics

Inclusion criteria: Staff Knowledge, ID Band Compliance, Blood Transfusion, Sample Collection, Medication Administration, Medication Infusion & Diet.

Exclusion criteria: Formula Feed, expressed milk, Cross Referral, OPD Consultation & OPD Diagnostics

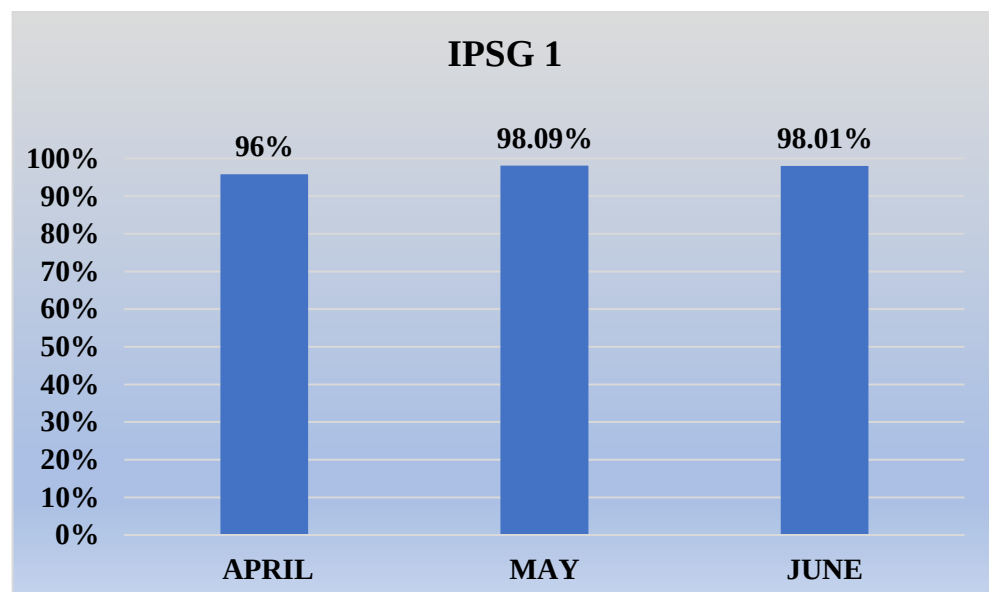


Figure:3.1: OVERALL COMPLIANCE OF IPSG 1

Interpretation:

The compliance with IPSG 1 (Identify Patients Correctly) showed a positive trend from April to June. Starting at 95.85% in April, there was a notable improvement to 98.09% in May, indicating enhanced patient identification practices. However, in June, the compliance slightly decreased to 98.01%, still reflecting high adherence but slightly lower than May.

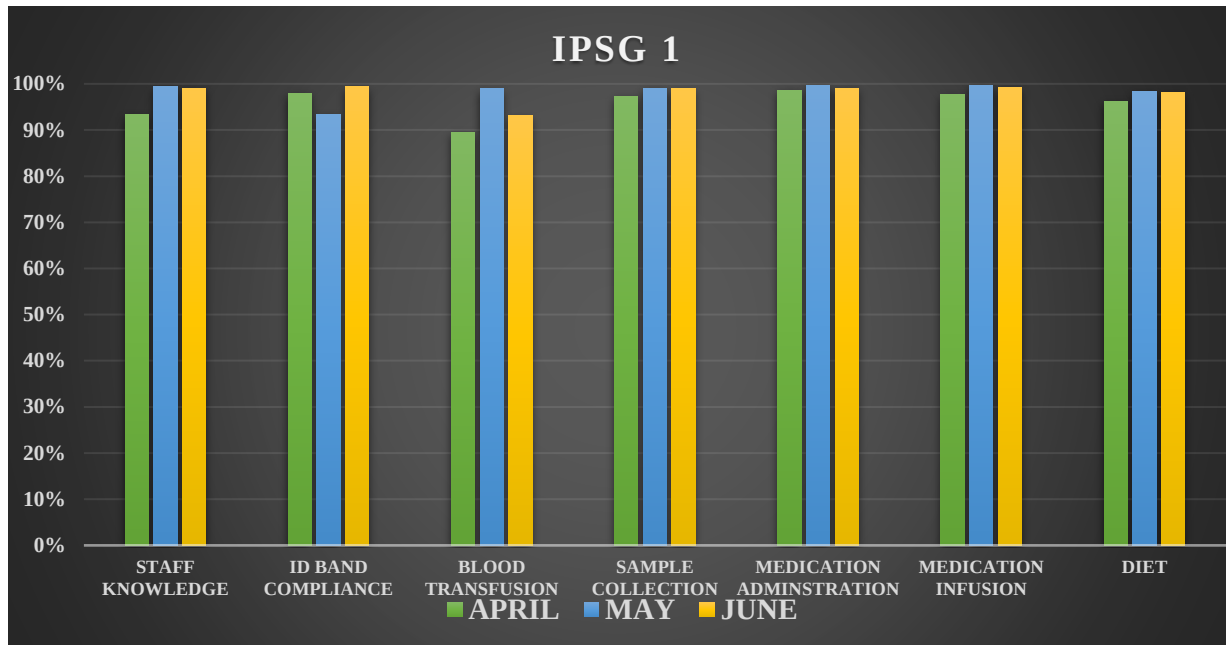


Figure:3.2: Different Areas of IPSG 1

Interpretation:

Compliance indicators for IPSG 1 improved significantly between April and June. Staff knowledge rose significantly from 93% in April to 99.33% in May, and it remained high in June. ID band compliance improved from a low in May to 99.33% in June, suggesting effective remedial steps. Blood transfusion compliance increased in May but was inconsistent in June, indicating the need for ongoing monitoring. Sample collection, drug administration, and infusion parameters all showed steady improvement, indicating high protocol adherence. Diet compliance also remained consistently high. Overall, the findings show considerable advances in patient safety, with several areas still requiring improvement.

Non-Compliances Observed:

- The staff competency area shows significant noncompliance because the staff members lack awareness about how to access the online portal, which contains all of the policies which can be used when needed. Additionally, the new staff members are not aware of the IPSG 1.
- According to the guideline, the patient's two identifiers, MRN number and full name, should be confirmed, however only one of these two identifiers are being checked. In the diet area, the patient's full name and type of diet are not available as labels on food trays.

- The primary noncompliance in the blood transfusion and sample collection area is failing to check the patient's identification on the blood bag, ID band and patient's MRN whenever practicable prior to the transfusion or sample collection.

IPSG Two: Improve Effective Communication.

It has 3 main elements under which we study IPSG 2, they are

- Critical value reporting
- Verbal order
- Shift handover

Here, in this study only **2 parameters** have been taken i.e **Critical Value Reporting** and **Shift Handover**.

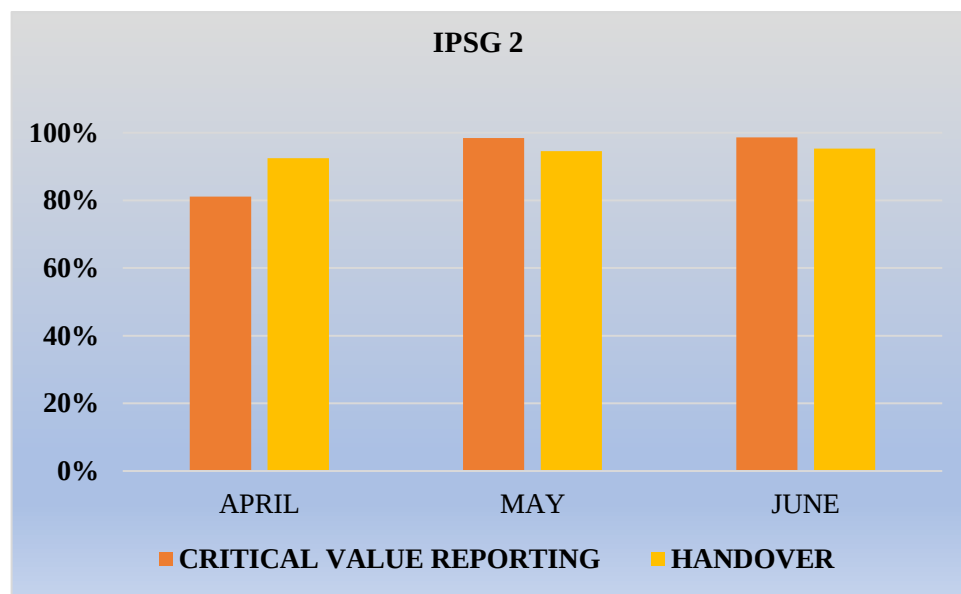


Figure:3.3: OVERALL COMPLIANCE OF IPSG 2

Interpretation:

The compliance rate for the reporting of critical values increased significantly from 81% in April to 98.67% in June, thus heavily indicating better timely communication of critical results. Compliance with handovers showed a gradual increase from 92.47% in April to 95.29% in June.

It reflects the continuous improvement in the transfer of information regarding patients during a change of shift.

Parameters to study the Critical Value Reporting:

Staff competency:

- Is staff aware about How to access the policy document?
- Is the staff aware about the policy?

Critical Value Reporting Laboratory:

- Availability of defined critical value reference range.
- Nursing station/ Nurse-in-charge is informed about critical value over telephone within 15 minutes.
- Documentation of critical value in the "Critical value register" of the nursing station is done by the receiving nurse.
- Documentation/acknowledgment of the critical value done in medical record by the doctor.
- Documentation of intervention done in the patient medical record is evidenced.

Inclusion Criteria:

Critical value of only laboratory is taken.

Exclusion Criteria:

Critical value of Radiology department (X-Ray/USG/ECHO/ECG)

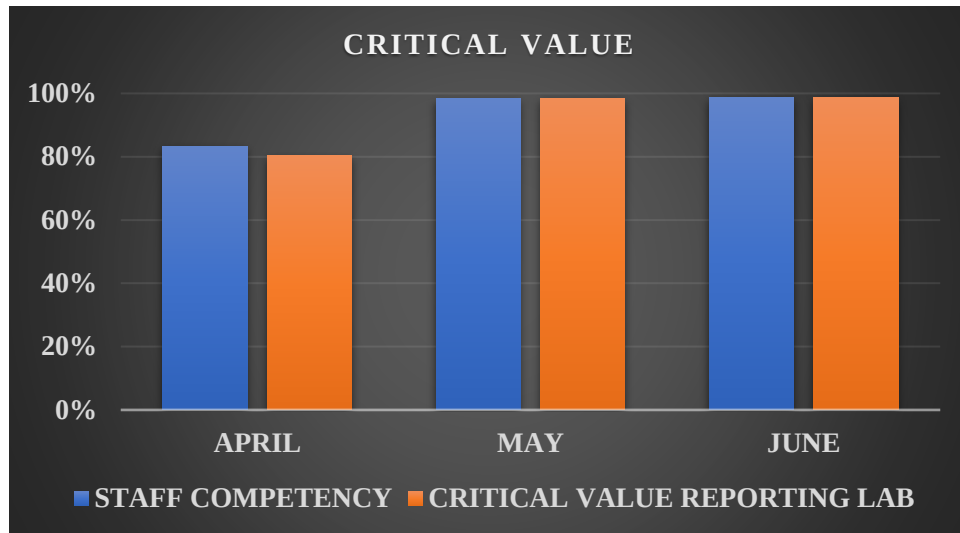


Figure:3.4: Compliance of Critical value reporting of Laboratory

Interpretation:

Staff competence in critical value management increased from 83% in April to 98.67% in June, while that of the laboratory's critical value reporting increased in the same period from 80.27% to 98.67%. This shows significant improvements in staff abilities and the laboratory's reporting procedures.

Non-Compliances Observed:

The receiving nurse records critical values in the “Critical value register” at the nursing station; this was frequently missed.

- The doctor’s documentation and acknowledgement of the critical value in the patient’s medical record, as well as any interventions that are done, were not appropriately documented.
- The online portal, which contains all of the policies that may be utilised when required, is not well-known to staff members, as shown in the considerable noncompliance in the staff competency area. The new employees also don’t know how to correctly record information in the register or regarding IPSP 2.

Parameters to study for Shift Handover:

Staff competency:

- Is staff aware about How to access the policy document?
- Is the staff aware about the policy?

Shift Handover:

- Availability of standardised template/register for the department or specialty.
- Doctor handover is evidenced during shift change in patient medical record.
- Nurse Handover documentation during each shift change.

ER to Clinical area:

- Nurses 'Handover documentation is documented in transfer checklist- ER transfer form.
- Doctors' Handover documentation is documented in transfer checklist- ER transfer form.
- Transfer form is completed before shifting.

Ward/ICU to OT:

- Transfer verification checklist is Completed before shifting the patient to OT.
- Transfer verification checklist SNDT completed before shifting the patient to OT.

OT to Ward/ICU:

- OT note is completed before shifting out the patient from OT to Ward/ICU.
- Post-op instructions are documented in transfer note to ICU.
- Transfer verification checklist is completed before shifting the patient from OT.
- Transfer verification checklist SNDT completed before shifting the patient from OT.

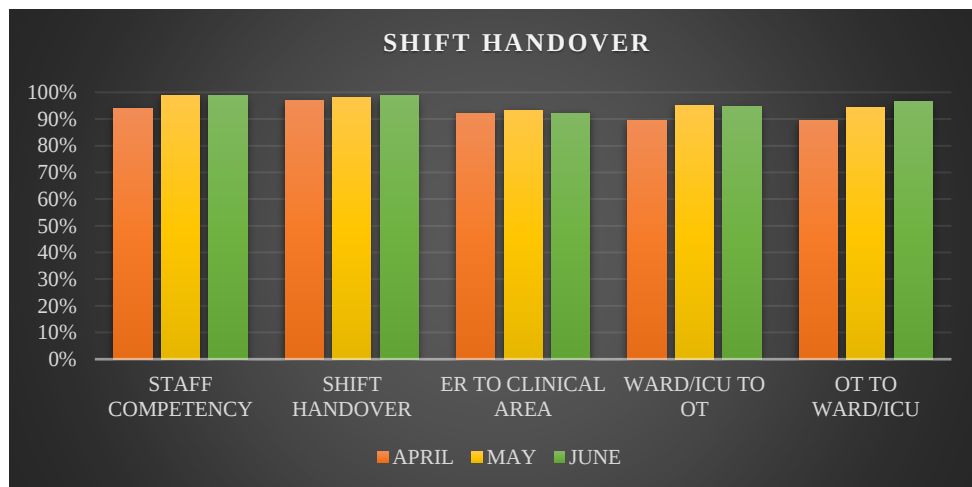


Figure:3.5: COMPLIANCE OF SHIFT HANDOVER

Interpretation:

April, May, and June statistics indicate a high level of proficiency in staff and shift handovers. Transfers from OT to Ward/ICU are getting better, but slight differences in the effectiveness within different areas are observed.

Non-Compliances observed:

- There is a significant violation in the transfer forms. When a patient has to be moved from an emergency room to a clinical area or from a ward or intensive care unit to an operating room, we fill out a transfer form with information on the patient that tells us about their status at the time of transfer. These transfer documents also provide information on the changing nurses and doctors. These transfer forms are either incomplete or not signed by the relevant staff members.
- In certain instances, nurses entered the incorrect patient MRN number for critical value reporting in the ward or ICU registers. In other instances, the laboratory entered the incorrect patient MRN number in the laboratory critical value register for a patient whose critical value was reported to the ward or ICU.

IPSG Four: Ensure Correct Site, Procedure, and Patient for Surgery

The International Patient Safety Goal (IPSG) 4 focuses on guaranteeing the correct patient, procedure, and surgical site. This protocol is essential to prevent critical surgical errors and ensure patient safety.

Surgical Safety Checklist:

The systematic verification in course of the Surgical Safety Checklist, regarding the patient information, procedure correctness, and surgical site before, during, and after surgery are all aimed at promoting IPSG 4. It reduces error proneness and improves surgical practice reliability.

Owing to the effectiveness of this checklist in standardizing the essential safety tests in such a large variety of surgical settings, it has been successfully implemented in many places around the globe.

Challenge to Implementing SSC:

Observations in many instances have reported a discrepancy between what is practiced as SSC and what is documented in the patient's file. Thus, reports of 100% compliance are at times misinterpreted, and on closer analysis, many of them remain far from the truth of adhering to the checklist.

Barriers to the successful widespread implementation of the SSC:

Organisational: The checklist may not be easy to integrate into daily practice because of interference with existing practice.

These involve:

- Cultural: If the surgical team perceives the checklists differently, this will affect the implementation.
- Individual: The implementation will be poor because of the lack of training or training and sensitivity to the effect.
- Operational: Perfect checklist following may be challenged by poorly planned timing and communication.

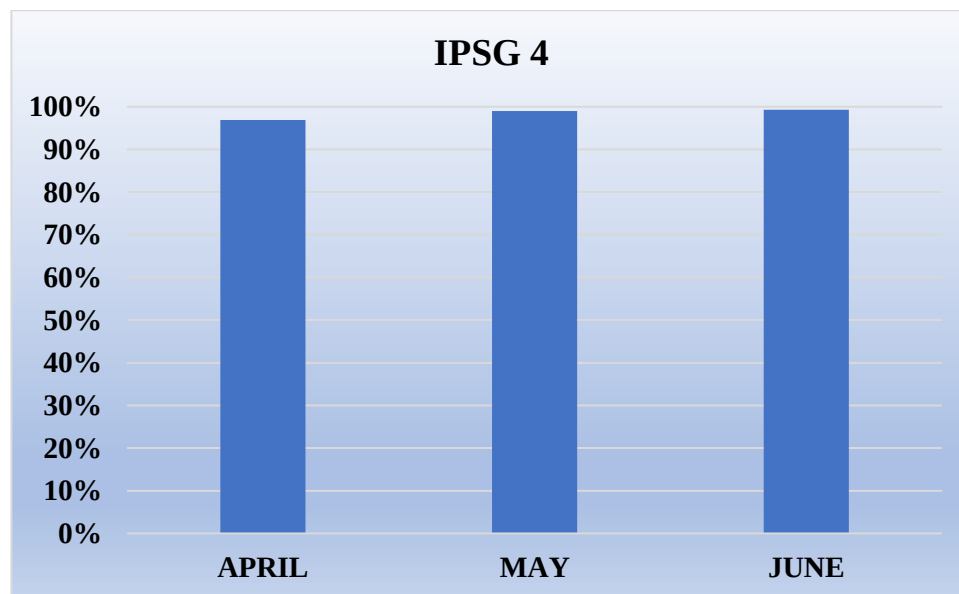


Figure:3.6: OVERALL COMPLIANCE OF IPSG 4

Parameters to study IPSG 4:

Staff competency:

- Is staff aware about How to access the policy document?
- Is the staff aware about the policy?

Pre-Operative Verification:

- Consents are obtained and completely filled.
- Blood & blood products arranged as per requirements.
- Site marking is done (when applicable) before shifting the patient to pre-op area.
- Site marking done by the primary surgeon.
- Site is marked with appropriate mark (no "X" mark).
- Pre-operative verification checklist filled appropriately with complete information (images available, implants availability/equipment functionality etc.)
- Pre-operative verification checklist has information on implants availability (if applicable).
- Sign-in is performed and documented are all parameters completed/signed/dated and timed.

Time Out:

- Time-out is performed before first incision.
- All participants paused & participated in Time-out.
- All relevant information discussed in time out (correct patient/ correct procedure/ correct site etc.).
- Completion of time-out is documented with date and time.

Sign Out:

- Sign-Out is performed before the site closure & documented.
- Name of the surgical/invasive procedure was confirmed during Sign out.
- Sponge & instrument count is done & documented.
- Specimen labelled before patient left the area.

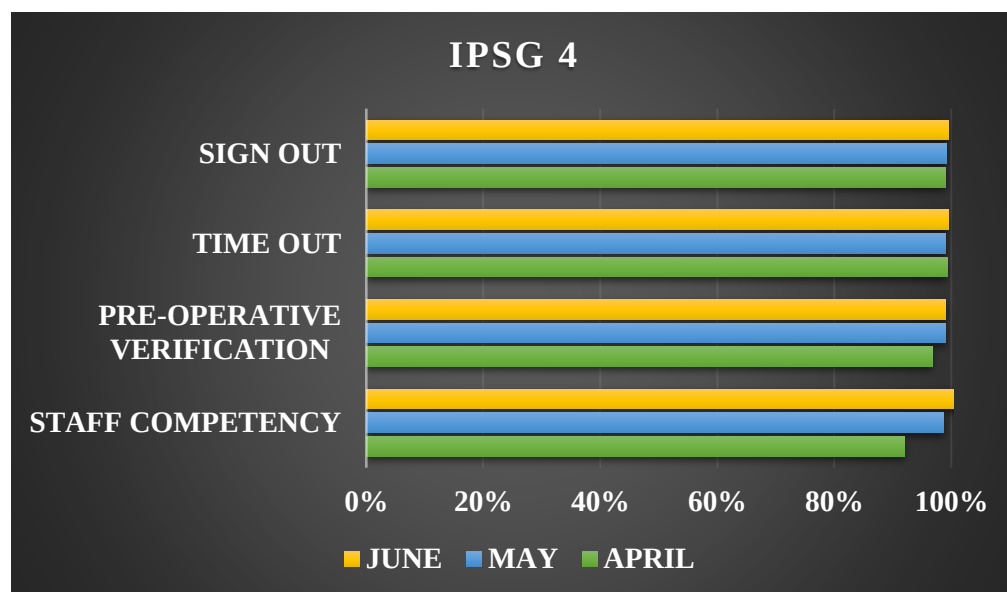


Figure:3.7: COMPLIANCE OF VARIOUS PARAMETERS OF IPSG 4

Interpretation:

This indicates good and improving compliance over the three-month period.

Staff Competency: Although showing only a reasonable increase in staff preparedness and adherence to surgical standards, the competency rate of staff has grown from 92% in April to 99.335% in June.

Pre-Operative Verification: High and stable levels were sustained, showing slight improvement in April from 96.75% to a steady 99.05% in May and June.

Time-Out: Near perfect compliance was maintained with minimal variation and concluded June at 99.50%.

Sign-Out: The performance has always shown strong compliance, showing some minor improvement from 99% in April to 99.50% in June.

Non-Compliance Observed:

- Non-compliance even extends to the sign-out area, where labelling of the specimen happens after the patient has left and not before. It is also accompanied by inaccurate completeness of the sign-out paperwork.
- Another area where the trends of non-compliance can be seen is in the timeout area since it is not documented precisely and on time for completion of the time-out.

- Rarely has noncompliance observed in the pre-operative verification domain. In a particular instance, neither the patient nor the guardian correctly completed and signed the anaesthesia consent form.
- In a few cases, the nurses marked the site instead of the primary consultant, and in some cases, the surgical safety checklist was not filled out correctly.

IPSG Six: Reduce the Risk of Patient Harm Resulting from Falls

Patient falls are the most common safety incidents recorded. The prevention of patient falls throughout their stay is a crucial component that must be addressed, and IPSG 6 is all about fall risk assessment, reassessment, and measures undertaken to avoid patient falls.

IPSG 6 is studied under the following area:

1. Staff Competency.
2. For In-Patient Department (IPD).
3. For Out-Patient Department (OPD).

Inclusion Criteria: In-Patient Department Patients.

Exclusion Criteria: Out-Patient Department Patients.

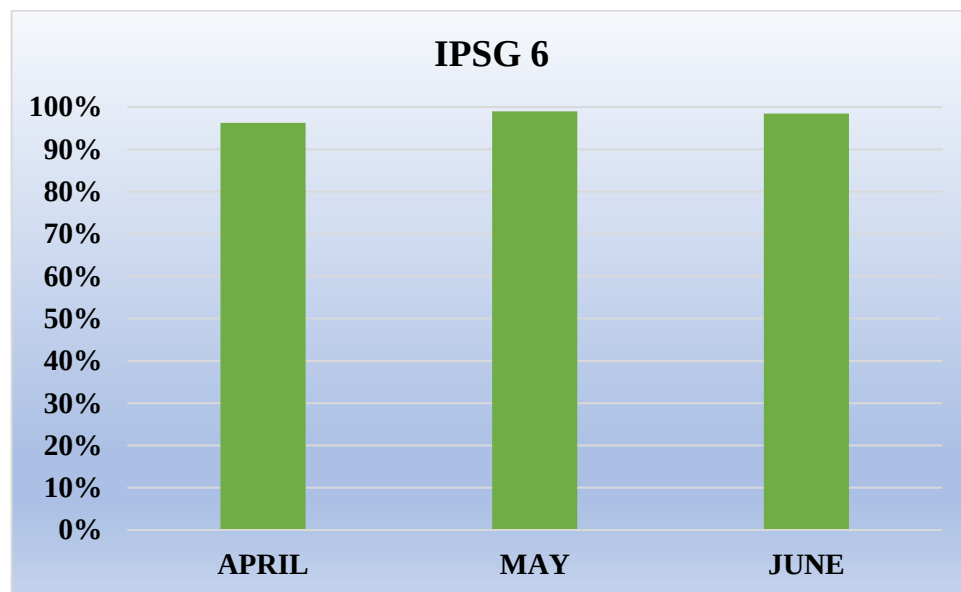


Figure:3.7: OVERALL COMPLIANCE OF IPSG 6

Interpretation:

The results indicate that adherence to IPSG 6 criteria has been good and increasing in the last three months. This proves an enhancement in the quality of fall prevention strategies carried out since it is observed with a rate of compliance that is continuously high, especially in May. Even though that slightly declined in June, compliance remained above 98 percent, which demonstrates the continued commitment to the safety of patients concerning the prevention of falls.

Parameters to study IPSG 6:**Staff competency:**

- Is staff aware about How to access the policy document?
- Is the staff aware about the policy?

IPD:

- Usage of age-appropriate fall assessment scale (adult and paediatric).
- Fall risk assessment and risk score documented on admission.
- Fall Prevention intervention Implemented as per Risk category (Low/Medium/High).
- Patient Educated on usage of call bell, safety belt, Hand bars, Grab bars done during orientation on admission.
- Fall risk re-assessment done & documented every 24 hours.
- Fall risk re-assessment done & documented (as per condition change as defined in policy).
- Patient Safety Round is completed for all Patients as per defined frequency.

FALL PREVENTION IN IPD			
Patient Educated on usage of call bell, safety belt, Hand bars ,Grab bars done during orientation on admission	Fall risk assessment and risk score documented on admission.	Usage of age appropriate fall assessment scale (adult and pediatrics)	Fall risk re-assessment done & documented (as per condition change as defined in policy)
Patient Safety Round is completed for all Patients as per defined frequency	Fall risk re-assessment done & documented every 24 hours	Fall Prevention intervention Implemented as per Risk category (Low/Medium/ High)	STAFF COMPETENCY

Figure:3.8: FALL RISK PREVENTION IN IPD

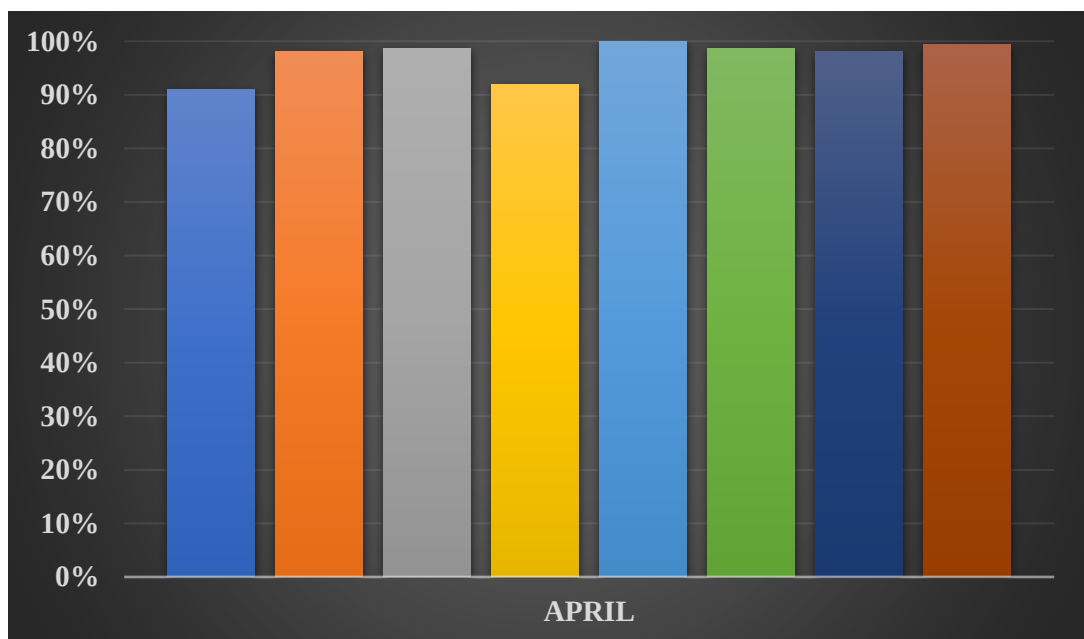


Figure:3.9: FALL RISK PREVENTION FOR THE MONTH OF APRIL

Interpretation:

The in-patient unit performed very well in terms of compliance with IPSP 6 during April. Staff competency was at 91%, risk assessments for falls were over 98%, well utilized and documented. Fall prevention interventions by risk levels were implemented at 92% while 100% of patients received safety education. Routine reassessments and safety rounds, nearly 99%, show a good fall prevention strategy put in place.

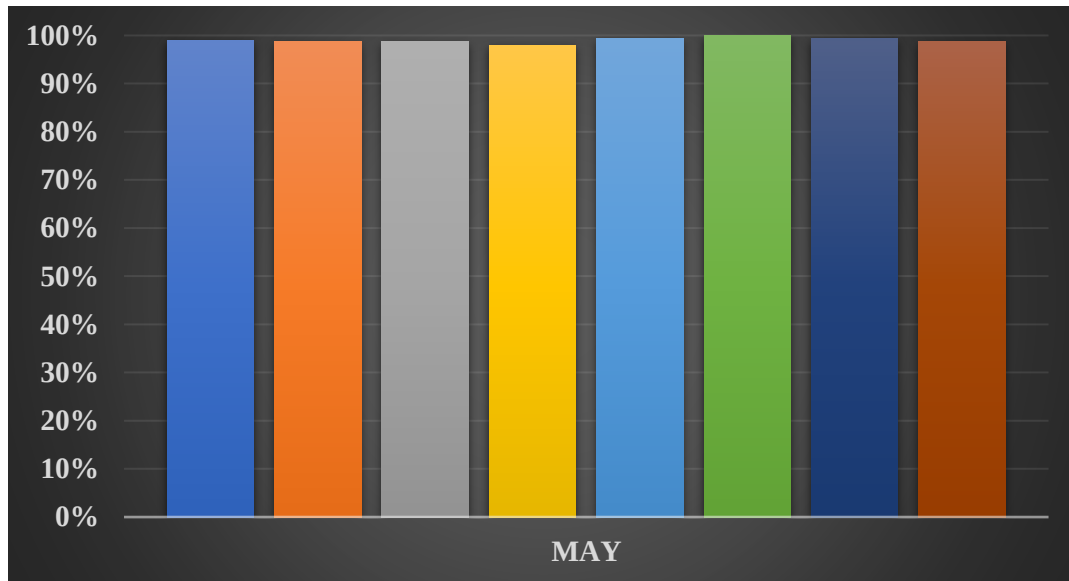


Figure:3.10: FALL RISK PREVENTION FOR THE MONTH OF MAY

Interpretation:

Adherence to IPSP 6 for fall prevention in the IPD improved significantly in May. Fall prevention has maintained its high compliance rate; all key indicators above 98% reflect improved procedures for ensuring the safety of patients. Staff competency increased from 91% to 99%.

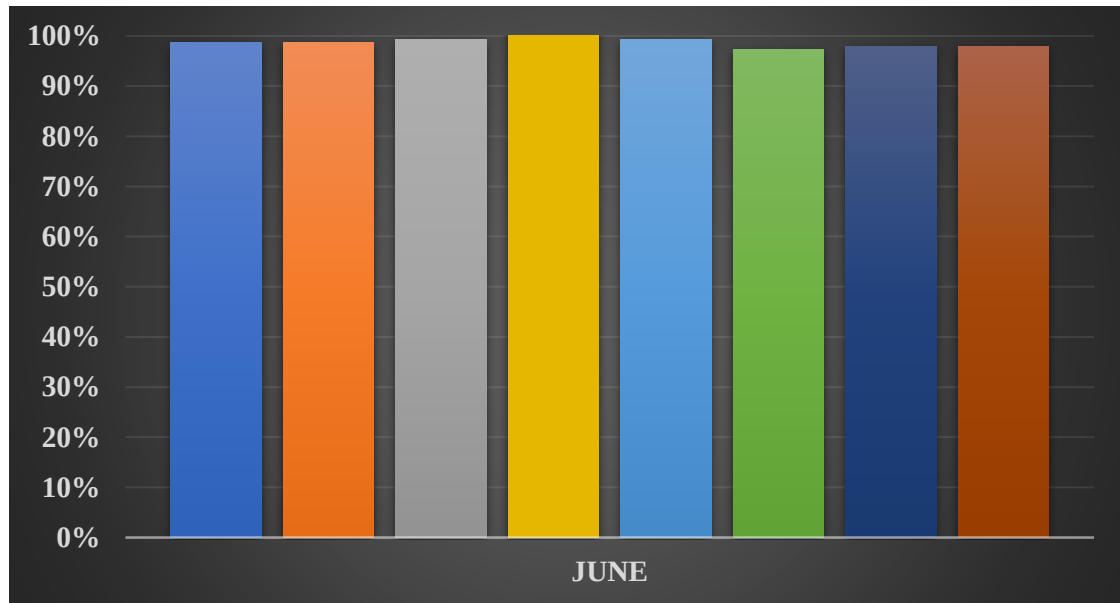


Figure:3.11: FALL RISK PREVENTION FOR THE MONTH OF JUNE

Interpretation:

IPD adherence to IPSPG 6 shown a notable improvement and continuously high compliance from April through June. Other fall prevention methods continued to be effective, with the majority of indicators above 98%, while staff competency grew from 91% to 99%.

Non-Compliances Observed:

- There was an incident of non-compliance in April when the adult fall assessment scale was utilised for a paediatric patient in the ward.
- The ward staff, upon the return of a patient from a theatre, fails to ensure that the parameter indicating "Fall risk re-assessment done & documented" is appropriately completed.
- Within these three months, it was observed that while the standard "Patient Safety Round is completed for all Patients as per defined frequency" was recorded, follow-up with adequate practicality was lacking.
- It was learned during the course of the study that it the patient was not marked accordingly to show that they have a high, medium or low risk for falling and can only be seen this if a person looks in the file.

CHAPTER 5

DISCUSSION

This three-month study assessed compliance for four International Patient Safety Goals and found significant improvements in patient safety practices. Organized safety protocols and treatment plans are very effective, which is supported by many previous studies.

Compliance to IPSPG 1 increased from 95.85% in April to 98.01% in June, which indicates improvement in patient identification practices. However, the lacuna in its implementation in the form of variable verification of patient identifiers calls for continuous education and rigidity in adhering to the protocols. Smith et al. (2023) reported similar improvements with the introduction of dual identifiers.

Compliance with critical value reporting improved from 81% to 98.67%, while that of shift handover improved from 92.47% to 95.29%. The results affirm the conclusion by Anderson and Lee, 2022, who established that improved strategies of communication have a significant effect on reducing medical errors. Nevertheless, in this study, gaps were identified in documentation and staff knowing the policy, thereby indicating a need for more training and standardised documentation that will facilitate high levels of compliance.

Compliance with surgical safety standards increased from 92% in April to 99.50% in June, thereby supporting research by Patel et al. (2023) that enables the use of the Surgical Safety Checklist in the prevention of surgical errors. On the other hand, challenges to accurate sign-out paperwork and adequate site marking present areas in which actual application still lags behind policy guidelines and demands more training and monitoring.

Fall prevention compliance remained very high, reaching as high as 98% throughout the study, while staff competency increased from 91% to 99%. The results presented herein are consistent with those of studies by Clark and Thompson, 2023, thus establishing the effectiveness of individualized fall prevention interventions. However, the concerns about the proper utilization of fall assessment tools and documentation about the reassessment, conducted on time, give rise to the most important question of more precision in the adherence to methods of fall prevention.

This study has demonstrated increased compliance with the IPSPG requirement of up to 100% in some areas, hence increasing the efficacy of the systematic safety intervention and monitoring. These results have brought out the message that a standard set of patient safety guidelines in their implementation is likely to improve the overall care quality. Future study

must therefore look at long-term trends, larger IPSG standards, and the effectiveness of ongoing training and policy reinforcement.

CHAPTER -6

CONCLUSION

IPSG 1: Identify Patients Correctly

In IPSG 1 compliance, "Identify Patients Correctly," the improvement from 95.85% in April to 98.01% in June ensures that procedures for patient identification are better. Although there is increased awareness among the staff and ID band compliance, the inconsistencies in the blood transfusion process still persist and need further monitoring. These included lacunae in staff knowledge, inconsistent application of patient identifiers, and inadequate checks at the time of blood transfusion and sample collection. Recommended improvements include staff education regarding the patient identification policy, access to policies through the web portal, dual identifiers on ID bands, and color-coded diet labels showing the full name with corresponding MRN on food trays. These have already been implemented to further improve compliance and patient safety.

In IPSG 2: Improve Effective Communication

In a study on IPSG 2 compliance, "Improve Effective Communication," critical value management improved from 81% in April to 98.67% in June, and compliance regarding shift handover increased from 92.47% to 95.29%. Improvements notwithstanding, challenges such as incomplete transfer forms and nonavailability of critical value documents by lab staff and nurses persist. Factors range from wrong MRNs in the critical value registers. Within these confines, several recommendations are made to improve the practice of documentation properly, implement read-back policies, record values in real time, and reactivate auto-generated SMS to consultants for critical notification of values. All these measures will enhance the effectiveness of communication, patient safety, and continuity of care.

IPSG Four: Ensure Correct Site, Procedure, and Patient for Surgery

For the fourth IPSG, "Ensure Correct Site, Procedure, and Patient for Surgery," compliance showed a significant enhancement from 92% in April to 99.50% in June. This resulted in improved timeout and sign-out, pre-operative verification processes, and competence of staff. Challenges still remain regarding timely sign-out documentation, specimen labelling, and occasional site marking by the nursing staff rather than the primary consultants. These must be supplemented with regular audits, prelabelled stickers for specimens, and monthly staff education. This enhances surgical safety and accuracy in the performance of the right

operation on the right patient at the right time, thus improving patient outcomes and reducing procedural errors.

IPSG Six: Reduce the Risk of Patient Harm Resulting from Falls

For IPSG 6, "Reduce the Risk of Patient Harm Resulting from Falls," compliance grew from 91 percent in April to 99 percent in June. Other fall prevention standards remained at or above 98 percent during that time frame. Key areas of improvement were increased patient education regarding fall safety, appropriate fall risk assessment, and appropriate preventive measures. Identified challenges included the misuse of adult fall assessment scales on paediatric patients, poor documentation of post-operative assessments, and poor patient safety rounds. Improvements to date have included the use of age-appropriate assessment tools, improved documentation, and neon-coloured wristbands for those patients identified as being at high risk. The call bells were inspected and repaired. Staff received education on reducing fall risks with patients. The safety in the hospital was enhanced.

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ANNEXURES

Annexure 1: Surgical Safety Checklist

 Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health				SURGICAL SAFETY CHECKLIST	
Patient Name : _____ Age : _____ Gender : _____				Affix patient label here	
Patient MRN : _____ Bed No. : _____ Department : _____					
(Before induction of anaesthesia) →		(Before skin incision) →		(Before patients leaves operating room)	
Sign in (with Nurse and Anaesthetist)		Time out (with Nurse, Anaesthetist and Surgeon)		Sign out (with Nurse, Anaesthetist and Surgeon)	
Has the patient confirmed his / her Identity ☐ Site ☐ Procedure ☐ Consent ☐				Nurse verbally confirms :	
Is the site marked ? ☐ Yes ☐ Not applicable		☐ Confirm all team members have introduced themselves by name and role ☐ Confirm the patient's name, procedure and where the incision will be made		☐ The name of the procedure recorded ☐ Completion of instrument, sponge and needle counts	
Is the anaesthesia machine and medication check complete ? ☐ Yes		Has antibiotic prophylaxis been given within the last 60 minutes ? ☐ Yes ☐ Not applicable		☐ Specimen labelling (read specimen labels aloud, including patient name) ☐ Whether there are any equipment problems to be addressed	
Is the pulse oximeter on the patient and functioning ? ☐ Yes		Anticipated critical events To Surgeon :		☐ To surgeon, Anaesthetist and Nurse :	
Does the patient have a : known allergy ? ☐ Yes ☐ No		☐ What are the critical or routine steps ? ☐ How long will the case take ? ☐ What is the anticipated blood loss ?		☐ What are the key concerns for recovery and management of this patient ?	
Difficulty airway or aspiration risk ? ☐ Yes ☐ No		To anaesthetist : ☐ Are there any patient specific concerns ?		Patient Name :	
Risk of >500ml blood loss (7ml / kg in children) ☐ Yes ☐ No		To Nursing Team : ☐ Has sterility (including indications results) been confirmed ? ☐ Are there equipment issues or any concerns ?		Patient ID : Diagnosis : Procedure : Department : Date : Time :	
Is essential imaging displayed ? ☐ Yes ☐ Not applicable					
Time :		Time :		Time :	
Name : _____ Sign.: _____		Name : _____ Sign.: _____		Name : _____ Sign.: _____	
Nurse _____ Anaesthetist _____		Nurse _____ Anaesthetist _____ Surgeon _____		Nurse _____ Anaesthetist _____ Surgeon _____	

Kakryal, Katra, Reasi, J&K. Ph. : 01992-279301-30, 9070888111/222/333, Emergency : 01992-279311

Version : 2
Format No.: NH/SSC/001

Annexure 2: Verification Checklist (Pre and Post OP)

	Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health																														
VERIFICATION CHECKLIST (Pre and Post op)																															
Patient Name : _____ Patient MRN : _____ Age : _____ Gender : _____ Bed No. : _____ Department : _____		Affix patient label here																													
Pre op verification - To be filled by Ward Staff																															
Proposed Operation																															
1.	NPO status																														
2.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Premedication Drug</th> <th>Dose</th> <th>Route</th> <th>Time & Date</th> <th>Given By</th> <th>Given By</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Premedication Drug	Dose	Route	Time & Date	Given By	Given By																								
Premedication Drug	Dose	Route	Time & Date	Given By	Given By																										
3.	BLOOD GROUP	Height																													
4.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Blood Ordered</th> <th>Qty</th> </tr> </thead> <tbody> <tr><td>Whole Blood</td><td> </td></tr> <tr><td>Packed Cells</td><td> </td></tr> <tr><td>FFP</td><td> </td></tr> <tr><td>Platelets</td><td> </td></tr> </tbody> </table>	Blood Ordered	Qty	Whole Blood		Packed Cells		FFP		Platelets		Weight SEROLOGY Hb TLC FBS / RBS Urea / Creatinine DLC INR / Platelets Comments																			
Blood Ordered	Qty																														
Whole Blood																															
Packed Cells																															
FFP																															
Platelets																															
5.	ID Band (Identification Band)	Y/N																													
6.	Consent for Surgery	Y/N																													
7.	Finance Clearance	Y/N																													
8.	Prosthesis	Y/N																													
9.	Allergies	Y/N																													
10.	Infections	Y/N																													
11.	Pressure Areas	Y/N																													
12.	Operation Site Examined	Y/N																													
13.	Shaving & Skin Preparation	Y/N																													
14.	Dentures & Crowns	Y/N																													
15.	Bridges	Y/N																													
16.	Jewellery	Y/N																													
17.	Make-up & Nail Polish	Y/N																													
18.	X-Ray & Investigation	Y/N																													
19.	Case Notes	Y/N																													
20.	Fluid Balance Chart	Y/N																													
21.	Urine Output Last 24 Hrs.	Y/N																													
22.	Information to relative	Y/N																													
Name of the Nurse : _____ Signature : _____ Date & Time : _____																															

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Version : 2
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Annexure:2.1: Verification Checklist (Pre and Post OP)(Backside)

Interventions: Please complete yes/no/not applicable (NA) as needed for the patient	Date Time							
		Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA
Educated on usage of call bell, safety belt, hand bars, usage of grab bars and use of supportive aids like specs, walker, non-slippery foot wears and hearing aids								
Slide rails and bed brakes are on								
Removed obstruction, trailing cords and sharp items if any								
Maintain call bells, waste bins, patient's personal possessions within reach								
Ensure usage of non-slippery well-fitting footwear to the patient.								
Ensure eyeglasses are used all the time and kept within safe reach (if applicable)								
<u>Intervention - High fall risk score</u>								
ID band with vulnerable sticker								
Reoriented surroundings and provided safe environment with adequate lighting								
Family and relatives are educated about prevention and assistance is sought								
Evaluate toileting needs more frequently								
Check/confirm with clinicians for any medication adjustment								
Always accompanied								
Nursing Staff Initials								
E.C. No								

Annexure:3: Patient Transfer Form

 Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health		PATIENT TRANSFER FORM			
Patient Name : _____ Patient MRN : _____ Age : _____ Gender : _____ From. : _____ To : _____ Date & Time of Transfer : _____ Transferring nurse : _____ Receiving nurse : _____ Name of the Admitting Consultant : _____		Affix patient label here			
Sl. No.	ITEM	REMARKS	Sl. No.	ITEM	REMARKS
I	Admission Documents		3	Pre Anaesthetic Questionnaire	
1	Admission Order		4	Operation Notes	
2	OPD Assessment		V	ITU Reports	
3	Finance Clearance Slip		1	ITU Observation Chart	
			2	Cardio Thoracic Post Op Orders	
			3	Doctors' Transfer Order	
II	Lab Reports / Investigations		4	AITU / PITU Progress Notes	
1	CT Films / Reports		5	CCO Monitoring / ACT Chart	
2	ECG Report / TMT Report		6	Haemodialysis Chart	
3	X-Ray - Pre Op / Post Op		7	Diabetic Chart	
4	ECHO / Doppler		8	Cardiac Rehabilitation Form	
5	USG Report		9	ITU Infection Control Sheet	
6	Angio Report / Cath Report		10	Billing Sheet	
7	MRI Films / Report				
			VI	Patient Belongings	
III	Nursing Documents		1	Oxygen Mask	
1	Vital Sign's Graphic Chart		2	Nebulization Mask	
2	Intake Output Chart		3	Nebulizer Kit	
3	Nursing Assessment forms		4	Crepe Bandage	
4	Medicine Card		5	Ounze Glass	
5	Consent Form - General		6	Thermometer	
	Procedure		7	Shaving Set	
	Anesthesia		8	Brush / Paste	
			9	Spectacles	
			10	Dentures	
IV	Operating Room Documents				
1	Pre Operative Verification Form				
2	Anaesthesia Documents				

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Version : 1

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Annexure:3.1: Patient Transfer Form (Backside)

Miscellaneous	Outside Reports	Pending Reports

1.Lines:

	Yes	No	Date of Insertion	Date of Removal
CVP				
Arterial				
Peripheral				

2. Pacing wires : ☐ Yes ☐ No 3. Pleural tube : ☐ Yes ☐ No

4. Skin Sutures : ☐ Yes ☐ No 5. Supporting Sutures : ☐ Yes ☐ No

6. Mediastinal wound dressing : ☐ Yes ☐ No 7. Foley's Catheter : ☐ Yes ☐ No

8. Dentures/Loose teeth : ☐ Yes ☐ No

9. Drainage tube removed on : _____

S - Situation Reason for transfer	
B - Background Brief H&P, Treatment & course summary	
A - Assessment Conclusion about the present situation	
R - Recommendations What do you think needs to be done	

Transfer Order given by :

Name	Signature	Date / Time :
------	-----------	---------------

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Annexure:4: Patient Safety Nursing Rounds

 Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health	"ALERT" PATIENT SAFETY NURSING ROUNDS
Patient Name : _____ Patient MRN : _____ Age : _____ Gender : _____ Bed No. : _____ Department : _____	Affix patient label here

Day Shift								
Date:	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM
Please (✓) against each parameter								
Assess for Safety								
Side rails up								
IV lines/ catheters & drains fixed properly								
Fall education provided								
Look for Comfort								
Pain								
Positioning								
Environmental Scan								
Move items within reach (call bell, water jug etc)								
Movable cardiac table not on exit side of the bed								
Remember to ask								
Need to use toilet								
Comfort level								
Tackle the Issue								
Remarks								
Name								
Signature								

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Annexure:5: Patient and Family Education

Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health				PATIENT AND FAMILY EDUCATION			
Patient Name : _____ Patient MRN : _____ Age : _____ Gender : _____ Bed No. : _____ Department : _____						Affix patient label here	
Doctors	Teaching Method	Physiotherapist	Teaching Method	Dietitian	Teaching Method	MSW/Floor Co-ordinator	Teaching Method
Informed consent	discussion	Use of special medical equipment like chest binders, nebulisers	Education material	Food drug interaction	Discussion	Spiritual teaching	discussion
Disease specific education	Education material & discussion			Diabetic/Warfarin Education	Education material & discussion	Education on process to voice complaints	Discussion and display boards
Nurses	Teaching Method	Nurses	Teaching Method	Clinical Pharmacologist	Teaching Method	Any Others:	
Growth and Immunization	Education material & discussion	Delay in treatment (more than 4 hours of defined TAT/Specified time)	discussion	Drug-Drug interaction	discussion		
Fall prevention	Education material & discussion	access to health information	discussion	Education on home medication	discussion		
Pain Management	Education material & discussion	Education on continuing care needs after discharge	discussion	Self-administration of medicines	discussion		
NPO	Education material & discussion	Valuables and belongings	Education material & discussion	Medication and safe use	discussion		
Ability & Willingness to Learn:							
Willingness to Learn- Yes No		Ability to Learn- Yes No		Interventions to reduce barrier		Outcome	
If No, Please write Barrier		If No, Please write Barrier		Translator		Understood or able to retain information	
Physical-Discomfort	Pain	Language	Education/Literacy	Teach Family/Significant Others		Require additional instructions	
Emotional-Disinterest	Anxiety	Cognitive ability	Any other	Limit Content		Others	
Any other				Others			
Topic: _____							
Willingness to Learn. If NO write Barrier	Ability to Learn. If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by	
						Name	Signature
Teaching Provided by: Name: _____				Signature: _____		Date: _____ Time: _____	

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Annexure:5.1: Patient and Family Education (Backside)

Topic: _____						
Willingness to Learn. If NO write Barrier	Ability to Learn.If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by
						Name Signature
Teaching Provided by:Name:		Signature:		Date:		Time:
Topic: _____						
Willingness to Learn. If NO write Barrier	Ability to Learn.If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by
						Name Signature
Teaching Provided by:Name:		Signature:		Date:		Time:
Topic: _____						
Willingness to Learn. If NO write Barrier	Ability to Learn.If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by
						Name Signature
Teaching Provided by:Name:		Signature:		Date:		Time:
Topic: _____						
Willingness to Learn. If NO write Barrier	Ability to Learn.If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by
						Name Signature
Teaching Provided by:Name:		Signature:		Date:		Time:
Topic: _____						
Willingness to Learn. If NO write Barrier	Ability to Learn.If NO write Barrier	Interventions	Teaching Method	Outcome	Department	Teaching received by
						Name Signature
Teaching Provided by:Name:		Signature:		Date:		Time:

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Version : 05
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Annexure 6: Fall Risk Assessment and Reassessment (Adult)

 Shri Mata Vaishno Devi Narayana Superspeciality Hospital Managed by Narayana Health				FALL RISK ASSESSMENT AND REASSESSMENT															
Patient Name : _____										Affix patient label here									
Patient MRN : _____ Age : _____ Gender : _____																			
Bed No. : _____ Department : _____																			
Each patient will be assessed for fall risk on admission and reassessed every 24 hours and upon transfer in from another unit, with a change in patient condition, after a fall, post surgery, after change of medication with possible side effects like sedation, hypo tension, impaired balance, impaired elimination, impaired reaction time etc.																			
Variables										Date:									
										Time:									
											Score	Score	Score	Score	Score	Score	Score		
Confused - disoriented - hallucinating										15									
Unstable gait, weakness										10									
History of syncope or seizures										25									
Recent history of falls										25									
Paralysis, hemiplegia, stroke										15									
New medicines (i.e, sedative)										20									
Post -op condition- sedated										20									
Drug or alcohol withdrawal										20									
Use of walker, cane, crutches, etc.										15									
Postural hypotension										15									
Poor eyesight										15									
Narcotics, diuretics, antihypertensive, etc.										20									
Bowel, bladder urgency - incontinence										15									
Age 60 yrs or above										15									
Uncooperative, impaired judgement										15									
Language barrier										5									
Poor hearing										5									
Total																			
Nursing Staff initials																			
E.C. No																			
Fall Risk Level																			
Risk Level		Score		Action															
Low Risk		0 - 24		Implement Low Risk Fall Prevention Interventions															
Medium Risk		25 - 44		Implement Medium Risk Fall Prevention Interventions															
High Risk		45 and higher		Implement High Risk Fall Prevention Interventions															

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Version : 2
Format No.: SMVNSH/NUR/009

Annexure 6.1: Fall Risk Assessment and Reassessment (Adult)(Backside)

Interventions: Please complete yes/no/not applicable (NA) as needed for the patient	Date Time							
		Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA	Yes/ No/ NA
Educated on usage of call bell, safety belt, hand bars, usage of grab bars and use of supportive aids like specs, walker, non-slippery foot wears and hearing aids								
Slide rails and bed brakes are on								
Removed obstruction, trailing cords and sharp items if any								
Maintain call bells, waste bins, patient's personal possessions within reach								
Ensure usage of non-slippery well-fitting footwear to the patient.								
Ensure eyeglasses are used all the time and kept within safe reach (if applicable)								
<u>Intervention - High fall risk score</u>								
ID band with vulnerable sticker								
Reoriented surroundings and provided safe environment with adequate lighting								
Family and relatives are educated about prevention and assistance is sought								
Evaluate toileting needs more frequently								
Check/confirm with clinicians for any medication adjustment								
Always accompanied								
Nursing Staff Initials								
E.C. No								

Annexure 7: IPGS 2.1: Critical value reporting checklist

Department	Sub Department	Question Text
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Specialty of Audit
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Check for Availability of Policy - IPSG 2.1
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Check for Staff awareness regarding policy
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Check for process of Critical value reporting in all diagnostic area
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Check for availability of Critical value Register
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Reporting compliance of critical value - As per TAT defined in the policy for the Parameter
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Documentation of critical value in patient medical record
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Documentation of action taken in medical record for the critical value
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Is there a process of Critical value reporting available for POCT (Point of Care Testing)
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Reporting compliance of critical value for the POCT - TAT compliance and reporting process as per policy
IPSG-2	IPSG 2.1 (CRITICAL ALERT REPORTING)	Documentation of action taken in medical record for the POCT

Annexure 7.1: IPSG 2.2: Handover communication checklist

Department	Sub Department	Area of Audit	Question Text
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Specialty of Audit
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Check for Availability of Policy - IPSG 2.2
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Check for Staff awareness regarding policy
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Doctor Handover documentation during shift change
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Nurse Handover documentation during shift change
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Doctors' Handover documentation with Transfer within the hospital - different level of care with all parameter as per standard tool
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Nurses 'Handover documentation with Transfer within the hospital - different level of care with all parameter as per standard tool
IPSG-2	IPSG 2.2 (HANDOVER COMMUNICATION)		Handover documentation with Transfer within the hospital - diagnostic area with all parameter as per standard tool

Annexure 8: IPSP 6: Fall risk prevention checklist

Department	Sub Department	Area of Audit	Question Text
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Speciality of Audit
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Write MRN of the sample audited in the comment section
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Check for Policy of IPSP 6
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Check for staff awareness regarding policy
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Check for usage of appropriate fall assessment scale (Paediatric & Adult)
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Fall risk assessment and risk score documented on admission.
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Fall Prevention intervention Implemented as per Risk category (Low/Medium/High)
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Fall Prevention intervention documented as per risk category
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Ensure usage of well-fitting clothes to the patient
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Evaluation of Toileting needs of the patient
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Fall risk re-assessment done & documented (as per condition change)
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Fall risk re-assessment done & documented everyday/every shift (as per policy)
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Patient Educated on usage of call bell, safety belt, Hand bars, Grab bars
IPSP-6(IPD)	IPSP 6 IPD FALL PREVENTION		Slide rails are up and bed breaks are on

Annexure 9: IPSG 4.1: Pre-Operative Verification

Questions		
Staff Competency	Options	
Is staff aware about How to access the policy document?	Yes	No
Is staff aware about the policy?	Yes	No
Pre-Operative Verification		
Consents are obtained and completely filled	Yes	No
Blood & blood products arranged as per requirements	Yes	No
Site marking is done (when applicable) before shifting the patient to pre-op area	Yes	No
Site marking done by the primary surgeon	Yes	No
Site is marked with appropriate mark (no "X" mark)	Yes	No
Pre-operative verification checklist filled appropriately with complete information (images available, implants availability/equipment functionality etc.)	Yes	No
Pre-operative verification checklist has information on implants availability (if applicable)	Yes	No
Sign-in is performed and documented are all parameters completed/signed/dated and timed	Yes	No

Annexure 10: IPSG 4.2: Post-Op Verification

Staff Competency	Options	
Is staff aware about How to access the policy document?	Yes	No
Is staff aware about the policy?	Yes	No
Time Out		
Time-out is performed before first incision	Yes	No
All participants paused & participated in Time-out	Yes	No
All relevant information discussed in time out (correct patient/ correct procedure/ correct site etc.)	Yes	No
Completion of time-out is documented with date and time	Yes	No
Sign Out		
Sign-Out is performed before the site closure & documented	Yes	No
Name of the surgical/invasive procedure was confirmed during Sign out	Yes	No
Sponge & instrument count is done & documented	Yes	No
Specimen labelled before patient left the area	Yes	No
Any equipment problem section completed	Yes	No

Annexure 11: IPSG 1 Checklist

Questions	Compliance	Non-Compliance
Staff Knowledge		
Is staff aware about How to access the policy document?	Yes	No
Is staff aware about the policy?	Yes	No
ID Band Compliance		
Is patient wearing an ID band?	Yes	No
Availability of patient's two identifiers on ID band	Yes	No
Availability of patient's full name as identifier	Yes	No
Availability of patient MRN as identifier	Yes	No
Blood Transfusion		
Availability of patient's two identifiers on blood bag (Patient's full name & MRN)	Yes	No
Identifier used on blood bag is same as patient identification band upon receiving the blood products	Yes	No
Identifier used on blood bag is same as patient identification band before blood transfusion	Yes	No
Checking of two Identifier on ID band, Blood Bag and with the patient wherever possible before the transfusion	Yes	No
Sample Collection		
Is vacutainer labelled with patients two identifier before sample collection?	Yes	No
Availability of patient's full name as identifier on vacutainer	Yes	No
Availability of patient MRN as identifier on vacutainer	Yes	No
Identifier used on vacutainer is same as patient identification band/Bill receipt (OPD Patients)	Yes	No
Is the patient's two identifier checked with the patient wherever possible before sample collection	Yes	No
Medication Administration		
Is the patient's two identifier checked before medication administration	Yes	No
Is the medication double check verification completed before administration	Yes	No
Medication Infusion		
Is infusion labelled with patient's two identifier?	Yes	No

Availability of patient's full name as identifier on infusion	Yes	No
Availability of patient MRN as identifier on infusion	Yes	No
Is the patient's two identifier checked before administering the infusion	Yes	No
Diet		
Availability of patient's two identifiers on food tray label	Yes	No
Availability of patient's full name as identifier on food tray label	Yes	No
Availability of patient MRN as identifier on food tray label	Yes	No
Availability of type of diet on the food tray label	Yes	No
Identifier used on food tray is same as patient identification band	Yes	No
Is the patient's two identifier checked with patient wherever possible before handing over the food tray	Yes	No

Annexure 12: Plagiarism Report

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