Quality Connect

National Accreditation Board For Hospitals & Healthcare Providers (NABH)

ISSUE 03

NABH NEWSLETTER | SEPTEMBER 2021

Sharing Best Practices
in Patient Safety

NABH

QUALITY COUNCIL® OF INDIA
QCI — Creating an Ecosystem for Quality

MESSAGE

Padma Bhushan Dr. B K Rao
Chairman- NABH

I extend my greetings and best wishes to the team of NABH as they take stock of their activities and endeavors undertaken during the year 2020-21 and present a report for perusal by the authorities.

Since its inception in 2005, NABH has been advancing constantly towards its objective of ensuring Quality Healthcare to one & all and to the last man in the line. Through the earnest and enthusiastic spirit, NABH team has been certainly raising the bar of quality culture in healthcare higher and still higher.

NABH with its dynamic, progressive, receptive,and resilient approach, is an ever-evolving body setting new destinations and putting in unflinching efforts towards their achievement. Its endeavors towards making the accreditation process free from complications and complexities has resulted in the ever-increasing number of healthcare bodies opting for assessment at various levels. The pandemic has not been an obstruction in the progress and functioning of NABH as it has conveniently shifted from physical to virtual webinars, assessments, training programs and desktop assessments. Corresponding progress has been witnessed in the Quality Connect initiatives like Trainings, Newsletter which not only keep healthcare associates abreast of NABH's undertakings, activities, and projects but also invites articles by the leaders in the sphere of healthcare.

I wish NABH many more achievements in future!

The sky will certainly not be a limit.

MESSAGE

Dr. Ravi P. Singh
Secretary General, QCI

This fiscal was a once-in-a-lifetime challenge for the Nation, pushing us as an organization to our limits. Looking back, we can proudly say that we have sustained in our mission to bring quality to the forefront in India despite extreme adversity, and succeeded to a large extent.

The COVID-19 pandemic has had a tremendous impact on economic and social activities throughout the world. On-ground third-party assessments, in particular, became difficult to conduct since they were not categorized as essential services. Despite the challenges posed by these unprecedented circumstances, QCI saw newer areas of operation opening up, which we had neither anticipated nor planned for. The Boards and Divisions within QCI found a way to remain committed to its mission, and leveraged these opportunities for creating positive change.

In the initial period of the pandemic, we collaborated with NITI Aayog in preparing a roadmap for ramping up COVID-19 daily tests in the country. Subsequently, during fiscal year 2020-21, we played our part in the fight against this pandemic by

accrediting over 1,000 private medical laboratories for RT-PCR testing, 137 testing laboratories to test critical equipment like medical devices, ventilators, PPE kits and sanitisers; and, 6 calibration laboratories for medical device calibration of Patient Monitors, Ventilators, ECG Machines and Pulse Oximeters.

We forayed into new areas and developed schemes like Workplace Assessment for Safety and Hygiene (WASH) for all workplaces to assist in their preparedness to mitigate COVID-19 risks. Under this, 300 organizations were assessed and ~1,500 participating organizations were trained. We assisted in fast tracking redressal of COVID-19 related grievances through Department of Administrative Reforms and Public Grievances (DARPG), with ~30,000 grievances cleared at an average disposal time of 1.45 days.

FY 2020 – 2021 also saw the unveiling of many new initiatives by QCI. A proud example of this is the National Program/Project Management Policy Framework with NITI Aayog, which is currently being set in motion, and has received tremendous support from

multiple ministries and departments across the government. We also created a scheme with the Food Safety and Standards Authority of India (FSSAI) for approval of hygiene rating audit agencies to help consumers take informed decisions on food outlets.

The pandemic also provided us with an opportunity to substantially expand our digital imprint and many activities and trainings were done digitally due to restrictions on movement. We were honoured to collaborate with Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry to create a marathon of webinars under the banner of Udyog Manthan from Jan 4th, 2021 to March 2nd, 2021 to foster a mindset of quality inspired productivity across Indian industry.

I compliment NABH on quickly adapting to the new normal. NABH has proved its resilience in the face of adversity, and its ability to rise above the odds. I would like to thank all our staff and our esteemed partners for their support, collaboration and the opportunity to serve the nation. We shall continue to adapt, grow, and strive for the best.

EDITORIAL

Dr. Atul Mohan Kochhar
CEO, NABH

Dear Colleagues

NABH Standards, benchmarked to the best in the world, have been built upon a matrix of all-encompassing Safety and quality for all – patients, staff and even facility.

Since 2019, every 17th September, has been established to be celebrated as the World Patient Safety Day. The primary purpose is to enhance global understanding of patient safety, increase public engagement in the safety of health care and promote global actions to enhance patient safety and reduce patient harm.

At NABH, we use every such celebration as an opportunity to reinforce our commitment to the cause of patient safety and quality.

The focus this year, is on maternal and new-born safety, particularly during childbirth

This year, we must raise global awareness on the issues of maternal and new-born safety, strive for adoption of best practices at the point of care, engage multiple stakeholders and adopt effective and innovative strategies We must also, call for urgent and sustainable actions by all stakeholders to scale up efforts, reach the unreached.

Let us also, reaffirm our commitment to the cause of Patient Safety and Quality.

Let us take best quality practices in healthcare to the last man in the line.

Jai Hind.

Let us light and freely share the Candle of Knowledge and Hope, to create awareness, dispel ignorance and aim for a disease free society.

PATIENT SAFETY
from The Doctor's Point of View

Dr. Prashant Kelkar

Dy Chief Medical Officer
(Pediatrics), JNPT Hospital,
Navi Mumbai

Communication- The Key to Patient Safety in Clinical Practice

"These illiterate ignorant village folk… how careless they can be," the doctor was muttering…Sakhubai had gone home with three bottles of medicines for her 5-year-old daughter. She had returned to the hospital as the child was vomiting after Sakhubai gave her the anti-scabies lotion to drink, applied the antihistaminic on the body and put the worms medicine in her eyes with a dropper lying at home. Did the doctor bother to think for a minute WHO had really been careless….?

Although generalization of the statement may seem blasphemous, the fact of the matter remains that patient safety is an issue which does not carry so much importance in the mind of the clinician, as much as the proper treatment of the patient. Of course, as more and more hospitals gear up for accreditation, clinicians have also started understanding the importance of quality care and patient safety, but a lot still remains to be done in this area.

Although this article will focus on patient safety in pediatric patients, as this is my domain of practice, the issues and possible solutions can also be extrapolated to adult population; the only difference being that in pediatrics, we are dealing with a subset of patients who are more vulnerable by virtue of the fluid nature of their growth and development, their dependency on caregivers, their relative inability to express themselves and the immaturity of their internal organs.

Slonim and colleagues, in a study done in USA, found 1.86–2.96 medical errors per 100 discharges of hospitalized children. Incidence of medical errors in a tertiary care pediatric unit in central India was 35.5% and severe morbidity due to the errors was seen in 2.4%. The frightening fact of these figures is not the figures themselves, but the exponentially possible numbers of errors which go undetected or unreported.

It is thus imperative that we take all measures possible to reduce errors and improve patient safety.

The ultimate aims of improving patient safety are

a. Reducing healthcare infections

b. Reducing complications during procedures and surgeries

c. Reducing injuries-physical, drug-related, fluid-related, skin-related etc

d. Reducing psychological harm (an aspect which is often overlooked and ignored)

e. Reducing unnecessary interventions

What then is the solution for reducing errors and improving care in clinical settings?

The following are some of the possible interventions:

a. Improve reporting and encourage a blame free culture of safety. Culture of safety was hitherto a very subjective subject, but now, with the requirement of accreditation standards, including NABH, mandating measuring safety culture objectively, it is hoped that reporting will improve.

b. Analysis and corrective action based on the reported errors.

c. Redesigning facilities, processes and systems within the healthcare setting, so that they become error-proofed to the extent possible

d. Having a multi-disciplinary and multi-stakeholder approach towards patient care, including appropriate documentation of care, clinical handovers etc. This includes involving the most important stakeholder-the patient, in care.

e. Training of all staff on patient safety

A survey done on members of the Pediatric International Patient Safety and Quality Community (PIPSQC) in 2015 about what they regarded as the top patient safety interventions revealed the following 10 interventions that they considered most relevant in paediatric practice namely

1. Hand hygiene
2. Team training
3. Clinical pharmacists
4. Infection barriers
5. CVL bundles
6. Pre-op checklist
7. Consent
8. Do-not-use abbreviations
9. Rapid-response teams
10. Medication reconciliation

A closer look at both the solutions and the survey findings above reveals the obvious focus on adequate, appropriate and effective communication.

COMMUNICATION then seems to be the key strategy in reducing errors. To illustrate this, let me quote a few real-life examples heard, witnessed or experienced (names changed to protect identity):

1. Miss Anjali was prescribed Insulin in the dose of 4.0 units. The nurse misread it as 40 units, leading to critical hypoglycaemia

2. "Sir, the swab count is wrong! ", exclaims Sr Jessy, as the surgeon continues to close the wound

3. Patient Roy a 6-year-old boy brought with paracetamol toxicity. He had been advised to give paracetamol "SOS" for fever, and parents gave the child paracetamol every half hour as fever was not reducing

4. When the mother reported a wound on the back of Miss Anju, who was in hospital for two weeks, a grade 4 ulcer was noticed by the nurse. Initial grade 1 pressure ulcer was not communicated and allowed to deteriorate to grade 4

5. "I was told that there will be pain at the injection site, so I thought it is a

normal thing", said Ruhana's mother who had brought the child with a frank abscess at the Pentavalent vaccine immunization site.

Could all these errors have been avoided by good communication? It certainly seems so.

I am sure we all recollect the grand rounds of our residency days in the teaching hospitals. The unit head, all residents and nurse in-charge as well as nurses, sometimes student nurses, used to go from patient to patient, the rounds sometimes lasting hours together…that was the best example of communication with all stakeholders. At one go, it fostered communication among the doctors, between doctors and nurses, between teacher and student and between doctor and patient. In todays' day especially in non-teaching hospitals, this may not be practically possible, hence we need to devise ways and means to communicate, with the primary aim of reducing errors (although good communication has its other collateral benefits too, such as strengthening the bond of trust between stakeholders).

Who should communicate with who? In a healthcare setting everybody should communicate effectively with each other; doctors among themselves, doctors with nurses, nurses with each other, nurses with paramedics, management with employees, trainers with trainees, and most importantly healthcare workers with the patient and family. In paediatrics, the last carries even more importance and may extend to extended family members, other caregivers and even school staff.

Communication, in the context of patient safety can either be in a written form or in a verbal manner. Examples of written communication include clinical care documentation, prescriptions (written legibly, without abbreviations generally following safe prescription practices), documented handovers, checklists, patient education material etc. The most important

example of verbal communication is what occurs between the doctor and the pediatric patient and family. Most pediatricians for example, would want the patient to return to them after visiting the pharmacy in order to explain the usage of the drugs (despite getting instructions from the pharmacist). In case of paediatrics, non-verbal communication plays significant role in creating trust between the healthcare staff and the often scared and wary tiny tot, allowing for better assessment, as well as ensuring better compliance to care.

Technology has been constantly changing healthcare for several decades, and even in the arena of communication, technological advances have proved a major boon to prevent errors. Patients can use the internet to gather additional information, can get instructions in their emails, and can access their laboratory reports and health records, just as providers can also easily access data at their fingertips. Social networking is being used extensively in healthcare settings to share information rapidly. Telemedicine can help primary physicians reduce their diagnostic and therapeutic errors by getting expert opinions, and robots can prevent surgical errors by the precision levels that they work on.

Healthcare systems are very complex, hence to expect that simple interventions towards patient safety will have transformational impact is unrealistic, and persistent research and evaluation of interventions is necessary to develop safer healthcare systems. Nevertheless, it can still be argued that the simplest tool that is available at all levels of healthcare namely effective communication, can go a long way in improving patient safety for pediatric practice in particular as well as in other healthcare settings in general.

Thought to ponder- "The most important thing in communication is hearing what isn't said" (Peter Drucker)

Dr. Jothi Clara Micheal

Director of Nursing (Strategies & Planning) - India Operations Division, Parkway Healthcare India Private Ltd. (Gleneagles Global Group and Continental Hospitals).

Clinical Best Catches as a Strategy to Promote Error Prevention Culture and Boosting the Morale of Bedside Nurses

An ounce of proactive & predictive role of a Nurse is worth a pound of cure and safety.

Placing safety in the hands of bedside nurses is the trust component. Nurses, are clinicians, who are highly capable when the right environment is fostered for their excellence. There has been a paradigm shift over the last two decades in the approaches to error prevention culture building. Primarily and the most vital to this strategy are the clinical knowledge domain of the nurses and the clinical competency level they possess in bedside care.

What went wrong is the usual question asked by the leaders in health care and this is not less common in nursing leadership too. A few years ago, I shifted my perspective in seeing who is the best nurse and how do we identify them? Is it because she/he is nice with the team members or does all that she/he is asked to do by the reporting authorities or she is able to perform to meet the key responsibility area (KRA)? How does the best nurse stand out from other nurses? In 2015 one of the cardiothoracic surgeons narrated in my interview with him that during his difficult surgery he was amazed by his nurse who extended the C Clamp, which helped him to identify the vessel and ligate. If not for that timely action the patient would have bled to death.

Here this nurse, by her timely presence of mind, did a great job and qualifies to be the best nurse. This is a known fact across the globe; which is why doctors prefer certain nurses with competency and trust. When such a rationale is shared while honouring best nurses, there shall be no grievances or professional rivalry but learning and motivation to prove their exceptional step-ups or performances. Thanks to NABH and QCI for its role in contributing by bringing nursing governance to visibility. There is a mind shift from what went wrong to what went right? This strategic approach is positive and interesting and engages bedside nurses.

Nurses are truly the first and the last line of defence in health care, as they spend maximum time next to the patient and they are available across the HCO with various job descriptions such as Dialysis Nurse, Cath Lab Nurse, Emergency Trauma care Nurse, Critical Care Nurse, Transplantation Nurse, Oncology Nurse, Blood bank – Apheresis Nurse, Ortho Nurse, Obstetrical Nurse, Neonatal Nurse, Paediatric Nurse, Operation Theatre Nurse etc. Not always do they learn from doctors; they also teach doctors in their area of expertise as they

master their skills and sharpen their clinical judgement over the period of time. Such nurses do the best catches shift after shift, assuring safety and quality care which is not documented or published. That is the reason why nurses are still Unsung Heroes of Health care. This paper is an attempt to bring to limelight the silent catches nurses do, to preserve the reputation of hospitals, clinicians and bring about better clinical outcomes contributing directly to the bottom line and indirectly to the top line in hospitals business. Over the years, nurses have played a significant role in identifying best catches in their respective units, which not only has saved the patients' lives but has also aided in a speedy recovery. The medication management initiative helps the nurses identify during her assessment that a patient with penicillin allergy had been prescribed a penicillin derivative. Her timely identification prevented the patient from an anaphylactic reaction, rather than blindly following orders. In another instance, a patient was advised Inj Meropenem 2.25gm by the doctor in the rounds, but it was transcribed as Inj Piptaz 2.25mg, the nurse identified and prevented a transcription leading to administration error. In another example Inj Doxorubicin 50mg was indented

for a patient, but the pharmacy dispensed Inj Cisplatin 50mg. The nurse identified and rectified the dispensing error. The nurse at the OT had requested for A-ve blood along with the prescription, but the blood bank issued A+ve blood. The nurse identified the error upon receiving the product and returned the blood to the blood bank. The oncology nurse prior to administration of calcium gluconate identified that the patient's heart rate was only 50bpm and administered Tab Alupent for heart rate regulation. Her timely assessment prevented the patient from deterioration. The hospital infection control nurse (HICN) during her regular rounds identified that 13 patients had bloodstream infection, it was identified that the patients had a growth of ralstonia mannitolilytica in the culture. On doing a root cause analysis it was identified that the sterile water was contaminated and the product was recalled. Therefore, this timely and vigilant action of the HICN further prevented bloodstream infections in other patients. The pain management nurse during her inpatient assessment for a paediatric child diagnosed with testicular torsion identified that the child was actually having pain at McBurney's point. Ultrasound was taken and was identified that the child had ruptured appendicitis and the child was taken for surgery immediately. Her skills in accurate pain assessments enabled the child to receive appropriate treatment and thereby the clinical outcome of the patient was good. The tissue viability nurse assessed a patient who was transferred from the operation theatre to NICU post laminectomy. She had multiple erythematous patches all over the body, not just at the pressure points. It was suspected to be a drug allergy by the clinicians, but she applied Allevyn pad for all the major pressure points. The patches slowly disappeared in two days, and it was identified that the patient developed erythematous patches due to pressure. Further, the pressure injury was prevented and the patient had a speedy recovery, which minimized the length of hospital stay. The critical care nurse during her assessment found that the ET tube was

slightly displaced from the fixed position and informed the intensivist. Chest X-ray was taken and the displaced ET tube was repositioned and confirmed. Her accurate assessment skills prevented the patient from detoriating. From the above examples, it is clearly evident that a competent and vigilant nurse can prevent a lot of errors with her proactiveness. The role of the nurse initiatives and practitioners in the hospital settings increases the quality of care, clinical outcomes and patient satisfaction.

Can best catches happen naturally or should it be nurtured? I would strongly say that it has to be nurtured for the reason; it is directly proportionate to nursing empowerment and nursing governance. Nurses must know why they must do an act against what she has to do. "Why" is very powerful in clinical practice E.g. Why 10 rights of medications to be followed while administering medicine? Why a patient has to be turned? Why side rails have to be up in all patients? Why enteric-coated drugs cannot be given for patients of RT feeds? Why bundle care to be adhered to? etc. This enhances her critical thinking skills, thereby enabling her to think out of the box and be vigilant. Best catches during holidays and nights is a measure to say that quality is improving reflecting the organizational philosophy and believing nursing philosophy – Professionalism, Expertise and Advocacy.

Across hospitals in all our Gleneagles Global Hospitals in India Operations Division we use this as a nursing quality indicator on a month to month basis. This has not only boosted the morale of the nurses but has developed an error prevention culture. The empowered role of initiatives and specialist nurses in the various units of the hospital has reported an increased level of patient satisfaction, timely identification of errors and escalation leading to better clinical outcomes of the patient. Let us empower and nurture more and more Best Catches towards assuring safer care and trust among the health care system.

Nurses are truly the first and the last line of defence in health care, as they spend maximum time next to the patient

from The Hospital Administrator's Point of View

Dr. Shakti Datt Sharma

M.D., D.A., D.H.A

Patient Safety in Healthcare Facilities – Administrator's point of view

Medical errors are a leading cause of harm, injury and unnecessary deaths in patients all over the world. These errors end up costing the healthcare industry billions of rupees each year. It is becoming increasingly important that the administrators of healthcare facilities take a keen interest in patient safety and ensure that patients receive reliable care, which enables them to maintain good health in the long run.

The hospital administrators plays a crucial role in developing a strategic patient safety program and incorporating it into the workplace culture in such a way that it is considered a high priority by the healthcare workers. Every healthcare environment must prioritize patient safety and administrators can implement a variety of controls to make hospital operations as seamless, efficient and secure as possible. The administrators must create, maintain and document policies and procedures designed to ensure safety of patients and train and educate their healthcare staff to follow the said controls. Additionally, they must continue to evaluate their policies against best practices published in the health care industry to drive continuous improvement. This helps prevent unnecessary complications and enables the healthcare facility to provide high-quality patient care and treatment.

The administrators must proactively identify and address patient safety issues, utilizing all available data at their disposal, in order to prevent any adverse events. Patient care records must be reviewed at a specific organization defined timeline, to determine if there are any common errors that may be preventable. Undermentioned are some of the patient safety features for health care facility that may be incorporated in their routine practices:

Listen and Communicate

Listening to patients goes a long way in making them feel comfortable. Improved communication between patients and healthcare providers allows the staff to fine tune their care. Increasing the frequency of rounds can help in achieving this goal.

Collect Patient Feedback

The patient's feedback regarding processes, procedures and level of care they received can provide a more objective perspective that the staff may not be able to gauge by themselves. This may highlight any gaps in the system that can be improved upon or remediated.

Employee Training and Growth

A well trained staff is the first step in reducing safety risks. Incentivising certifications, training and providing the latest guidelines to employees aids their growth and improves the quality of care they can provide, thereby improving patient experience.

Targeted Educational Programs

Healthcare personnel might need to interface differently with different groups of patients. For instance, a child undergoing a treatment might need to be spoken to in a different way than a senior undergoing the same procedure.

Technological Aids

Newer and improved technology, helps the healthcare providers deliver better care with more efficiency and significantly lower rates of errors. It has been seen that health care facilities are reluctant to procure newer gadgets citing various reasons

QUALITY | SAFETY | WELLNESS

including return on investments, but it has to be emphasized by the good administrators that getting newer technological aids ultimately saves cost in the long run helps in reducing medical errors.

Consistent Schedules

Over-work, stress, long working hours can all contribute to exhaustion and inadvertently lead to avoidable mistakes. Keeping consistent schedules will allow employees to avoid burnouts, decrease stress and be more focussed and efficient during their shifts. Maintaining adequate HCW: patient ratio goes a long way in achieving goals of patient safety.

Audit and Assess

Conducting audits and assessments with external organizations and professionals can help observe and analyze the environment from a fresh and unbiased perspective. The results of such an assessment can steer the healthcare facility to address the highest priority concerns and implement improvements thereby improving the quality of patient care they provide.

Use Tool Kits & Implement Checklists

Toolkit can be used to deliver and implement quick improvements. Conducting surveys amongst the healthcare staff on patient safety can also help highlight any issues that might have been missed previously. World Health Organization has published a Surgical Safety Checklist as a global initiative to prevent and reduce the adverse consequences and to improve patient safety during surgical procedures.

Reduce Risk During Discharge

Discharges are points of extreme risk for patient safety since inpatient care ends and the patient is transferred from the hospital or healthcare facility to other primary or domestic care. Lack of proper evaluations and preventive measures during discharge might cause significant harm to the patient.

Facility Rounds

The administrators should take daily/weekly facility rounds and the scope of inspections should include survey of every nook and corner of the health care facility to detect, assess the hazard potential with respect to every possible hazard reported or not reported. Such rounds facilitate speedy allocation of priorities, allocation of funds and implementation of corrective measures.

Every individual working in the health care facility plays a role in delivering quality patient care and ensuring patient safety. It is also important that the HCW safety is ensured by the administrators. The administrators are responsible for leading their staff in these efforts by crafting a good patient safety program that's designed to minimize the likelihood of errors. Such programs require constant reviews, analysis and comparisons against new guidelines and best practices. Brainstorming of newer techniques and gathering creative ideas from professionals should be done to implement continuous improvement. Under the watchful eyes of regulatory authorities, it can be a stressful exercise for administrators to improve the patient outcomes. But it can prove to be a rewarding and fruitful experience once their efforts are acknowledged, and patient safety goals and clinical service excellence are achieved.

PATIENT SAFETY
from The Architect's Point of View

Dr. Deepti Gupta

Architect, Project Manager, and Engineer, Visiting Professor (School of Planning and Architect, New Delhi)

Hospital Infrastructure for Patient Safety

A hospital is a very complex building due to its very complex set of functions. It is important that it is designed and built in such a way that each and every requirement of the hospital is fulfilled. The infrastructure requirements of a hospital are quite unique and complex, and therefore require special attention. There are many guidelines, regulations, laws and codes to help ensure that the patient safety and care is maintained. As such it was always quite complex to design a hospital with adequate and efficient infrastructure, but post Covid people are waking up to further challenges presented by this world wide pandemic. Even the most advanced countries, with the top most medical facilities have not been able to get a grip on the situation, and we are now looking at a scenario where we might have to upgrade our codes, norms and regulations. In a hospital, the most important factor is the safety of patients. This includes general safety, safety of the patients who are not mobile or are on life support, safety in case of fire, safety from the point of health and hygiene, avoiding cross-contamination at every cost. Ease of access and egress for patients is also important. There are multiple aspects in Planning, Designing and Commissioning of Health Care Infrastructure. They range from Policy making, site selection, budget allocation, Planning and designing, construction and project management, to day to day functioning of a hospital in an efficient manner. While designing a hospital we need to take care of the various departments, the connectivity between each department, and most importantly, we need to take care of patient safety and ease of movement. Compartmentation and isolation of different facilities and different patients is also required in various places. When we speak of separation and isolation in the context of a hospital, it may be in terms of not only physical isolation, but also in terms of air. Eg., if a patient is suffering from a communicable disease, the exhaled air

cannot be allowed to come in contact with other people, and needs to be filtered before being released into the atmosphere. Conversely if a patient is in a precarious condition, eg, a patient suffering from intensive burns, or a patient in advanced stages of AIDS, then it may not be safe for them to breathe the same air as exhaled by others, and we need to provide them with filtered air. Similarly Operation Theaters and clean rooms will have very high standards of filtration etc. Hospitals have a large number of Departments, each with their unique requirements and design considerations. The departments in a Hospital may vary according to the size of the hospital as well as its purpose and speciality. The various facilities in a hospital may be: OPD Emergency IPD - wards and rooms OTs - different sizes ICUs and NICUs Speciality departments like Oncology Diagnostics Labs including Path and Radiology Medical gases Laundry Dietary department - food and kitchen Blood bank Waste Management Mortuary In order to commission a hospital, there may be many

stages like: Project feasibility - Need of the healthcare facility ,Legal feasibility, Socio-economic cost-benefit analysis, or commercial viability as the case may be, Site selection, Budgetary availability etc. Planning- Project Planning considering Time, Cost and Quality Design - Considering all spatial and infrastructure requirements and technical aspects, including engineering services, keeping in mind Patient Safety and comfort. Structural design- for structural stability of the buildings. Services design- of Mechanical, Electrical and Plumbing systems, in short MEP Construction and project management considering Time, Cost and Quality and TQM Operations and facilities management of the hospital Regular maintenance and upgrade A few decades ago buildings were smaller and simpler. But now they are bigger, more complex, and provide more comfort and safety. To achieve higher levels of comfort, we have to design the MEP services according to the desired standards.. MEP, or

Mechanical, Electrical and Plumbing Services, include:: HVAC - Heating, ventilation and air conditioning. Electrical - Energy supply and distribution, Lighting Plumbing - Water supply, drainage and plumbing, Sewage disposal Fire safety - detection and protection by firefighting and timely egress. Escalators and lifts. Information and communications technology (ICT) networks. Lightning protection.Security and alarm systems. Building Management systems. Specialist building services for hospitals would also include systems for: Bacteria and humidity control, Emergency power, Specialist gas distribution, Special provisions for radiology labs, operating theatres. Building services play a central role in contributing to the design of a hospital building, and the building services design must be integrated into the overall building design from a very early stage. In the subsequent issues of the newsletter, we will further elaborate on the various aspects of Hospital Infrastructure for Patient Safety.

Dr. Eesha Arora Narang

Assistant Director–NABH

Accreditation Enhancing the Culture of Patient Safety

There can be no dual opinion that Accreditation has contributed significantly towards raising the standard of the safety culture for both the patients & the healthcare workers. The accreditation focuses on patient safety based upon national/international standards, through process of self and external evaluation. Compliance with the standards is essential for achieving accreditation which undoubtedly results in higher quality of care and patient safety.

The current 5th edition of hospital accreditation standards accredited by ISQua includes objective elements designated as Core, Commitment, Achievement & Excellence that focus on developing the culture of safety. For a glance at the objective elements related to safety, the Imaging services should comply with legal and other requirements, all the statutory requirements are to be met with such as Atomic Energy Regulatory Board (AERB) clearance, dosimeters, lead shields, lead aprons, signage, display as per Pre-conception and Pre-natal diagnostics techniques (PC-PNDT) Act, reports to the competent authority, etc. The organisation shall have a Radiation Safety Officer. There has to be an established safety programme in Lab & Imaging services. It ensures that

the adequate safety measures are available, e.g. PPE, dressing materials, disinfectants, fire extinguishers etc. and safety issues should be addressed at all the levels. The organisation ensures that safety precautions have been adhered to while transporting patients to and from the imaging services. The Care of Patients deals in providing care adhering to infection control and safety practices. Safety is paramount when using narcotics, chemotherapeutic agents and radioactive agents. A Multidisciplinary committee is responsible for evaluating medication use, and patient safety incidents involving medications. The committee shall update information on rational use, medication errors, medication management, adverse drug reactions and patient safety, especially in the context of high-risk medications. A bio-safety cabinet of class II (preferably IIA) with appropriate personal protective equipment shall be used for preparing/mixing chemotherapeutic drugs

The Hospital Infection control specifies standards about healthcare provider's safety where the organisation implements occupational health and safety practices to reduce the risk of transmitting microorganisms among health care providers & the organisation implements

measures for blood and body fluid exposure prevention. The organisation ensures that health care providers use appropriate personal protective equipment to prevent blood and body fluid exposures. The organisation should strive to eliminate the use of needle devices whenever safe and effective alternatives are available. It states that the organizations could consider providing needle devices with safety features.

Chapter 6 is dedicated to Patient safety & Quality Improvement. The standards encourage an environment of patient safety. The organisation implements a structured patient-safety programme. The program is developed, implemented and maintained by a multidisciplinary safety committee. The committee is responsible for pro-active risk assessment. The same shall be done using tools like Hazard Identification and Risk Analysis (HIRA), Failure Modes and Effects Analysis (FMEA) in both clinical and non-clinical processes and areas. The patient-safety programme is documented as a manual which is comprehensive and covers all the major elements related to patient safety affecting clinical and support services.

National/international patient-safety goals/solutions are implemented. The

organisation should have a robust incident reporting system. The organisation identifies and monitors key indicators to oversee patient safety activities. Sentinel events shall be defined. All incidents are investigated, and appropriate action is taken.

The programme covers incidents ranging from "no harm" to "sentinel events".

Designated patient safety officer(s) coordinates implementation of the patient-safety programme & the designated clinical safety officer(s) coordinates implementation of the clinical aspects of the patient-safety programme. The organisation performs proactive analysis of patient safety risks and makes improvements accordingly. The management should support the patient safety and quality programme. The patient-safety programme is reviewed and updated at least once a year.

The management creates a culture of safety. The management needs to measure its safety culture regularly (at least once a year). This should be measured using validated surveys example, the Manchester Patient Safety Framework (MaPSaF), Safety Attitudes Questionnaire, AHRQ Surveys on Patient Safety Culture (SOPS™). The management should act on their patient safety culture assessment results.

The leaders at all levels in the organisation shall be aware of the intent of the

patient safety and the approach to its implementation. Departmental leaders are involved in patient safety. The management makes available adequate resources required for patient safety and earmarks adequate funds from its annual budget in this regard. The management uses the feedback obtained from the workforce to improve patient safety.

The organisation has a system in place to provide a safe and secure environment. Patient-safety devices and infrastructure are installed across the organisation and inspected periodically. For example, grab bars, bed rails, signposting, safety belts on stretchers and wheelchairs, alarms both visual and auditory where applicable, warning signs like radiation or biohazard, call bells, fire-safety devices, etc.

Facility inspection rounds to ensure safety are conducted at least once a month.

The organisation's environment and facilities operate to ensure the safety of patients, their families, staff, and visitors. Patient safety aspects in terms of structural safety of hospitals, especially of critical areas are considered while planning, designing and construction of new hospitals and re-planning, assessment, and retrofitting of existing hospitals.

The organisation conducts electrical safety audits for the facility. The hazardous materials are identified and used safely

within the organisation. The organisation could develop its procedures based on Material Safety Data Sheets (MSDS). Competent personnel operate, inspect, test, and maintain equipment and utility systems. The necessary infrastructure and tools like a ladder, voltmeter, spanner and relevant PPE norms like safety boots, gloves shall be available.

The procedures for medical gases address the safety issues at all levels.

Credentialing and privileging of health-care professionals (medical, nursing and other para-clinical professional) are done to ensure patient safety. The induction training includes training on safety. The training shall incorporate aspects of patient, visitor, and staff safety. This includes training on 'codes'. Staff are trained in the organisation's safety programme, in occupational safety aspects, in the organisation's disaster management plan and in handling fire and non-fire emergencies. The organisation promotes staff well-being and addresses their health and safety needs.

The above stated objective elements make it evident that there is a direct and close relationship between accreditation and culture of patient safety.
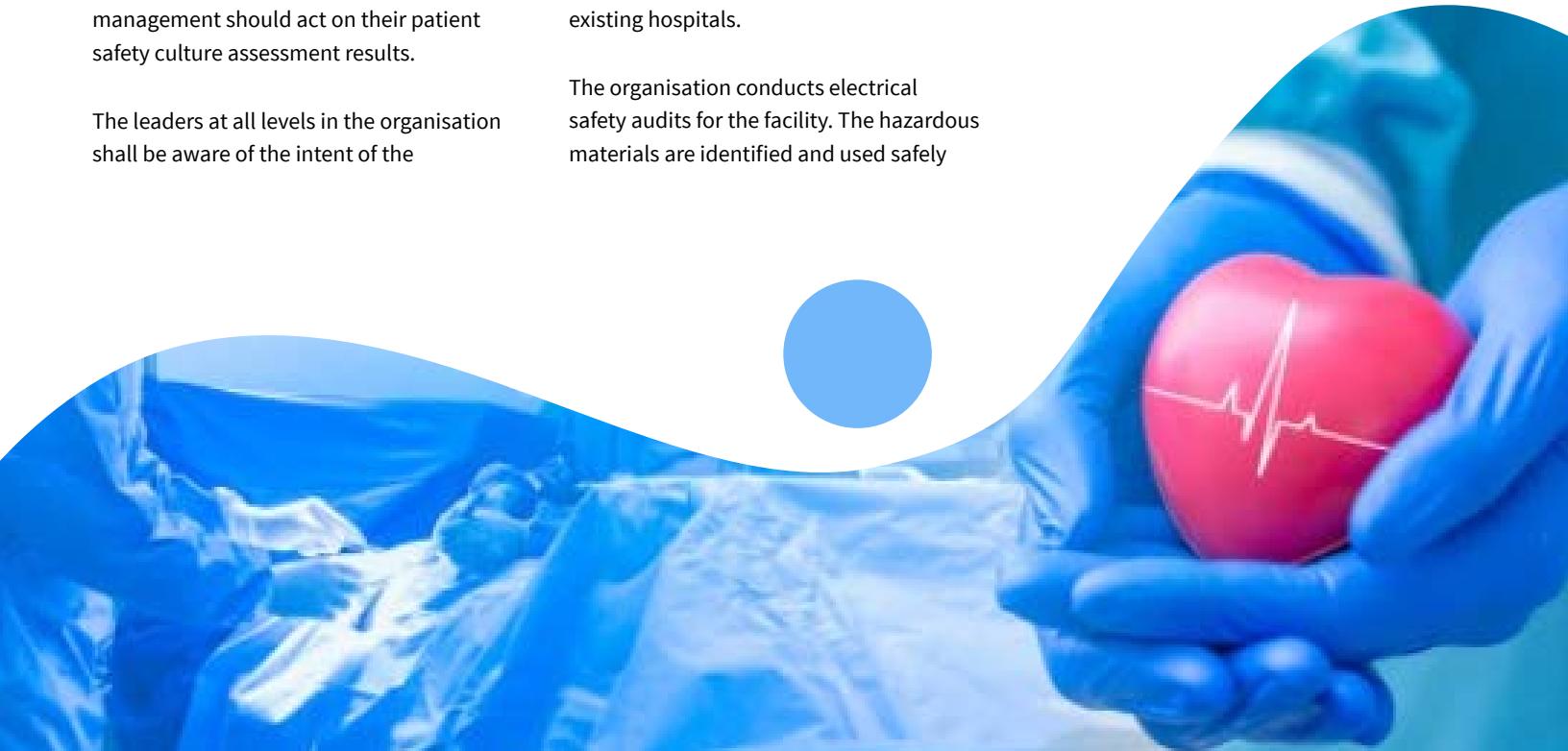
International Patient Safety Goals

Goal 1

Identify Patients Correctly

Goal 2

Improve Effective Communication

Goal 3

Ensure correct-site, correct-procedure, correct-patient surgery

Goal 4

Improve the Safety of high alert Medication

Goal 5

reduce the risk of health care-associated infections

**Goal 6**

Reduce the Risk of Patient Harm Resulting from Falls

Sharing Best Practices Under Various Goals

Nisheeth Shankar Shrivastava

Article on International
Patient Safety Goals (IPSG)

International Patient Safety Goals

Joint Commission International (JCI) has introduced IPSGs in 2006. These goals are patient centric goals. These are the goals which are used to prevent the patient from any risk. There are six IPSGs which are updated time to time from they have introduced. First update of IPSGs was made in 2011 after that second update of IPSGs was made in 2017 (at present we are following same). These IPSGs are as follows:

Identify Patient Correctly
Goal:1

Improve the Safety of High Risk Medication
Goal:3

Reduce the Risk of Healthcare Associated Infections (HAI)
Goal:5

Goal:2
Improve Effective Communication

Goal:4
Ensure correct site, Correct - Procedure Correct - Patient Surgery

Goal: 6
Reduce the Risk of Patient Harm Resulting From FallsResulting From Falls

---

Goal:1

Identify Patient Correctly

This goal stated that before any procedure, surgery, medication administration, dispensing of medication or any other situation which is related to patient, the identity of patient must be confirmed. In Health Care settings it is suggested that patient identification must be done with at least two identifiers. These identifiers could be Patient's name & UHID (Unique Healthcare Identity).If any patient doesn't have name or patient is in condition where he/she unable to confirm their name, that type of patient could be named as UNKNOWN 1 & 2 and so on and with this name an UHID should be generated.

Goal:2

Improve Effective Communication

This IPSG emphasizes on the effective communication between the Healthcare personnel. This goal prevents the patient from any kind of risk which may rise due to communication gap between the healthcare personnel. According to this goal the information of the patient has to be confirmed in a proper way before taking any kind of decision which is related to patient.

In any healthcare setting there are two major conditions where the communication played a vital role in patient treatment. They are as below:

1. When the treating consultant is unable to take patient's call physically or in case when he give verbal order

Condition related to verbal order:

First of all we will not follow any verbal order and it is also the responsibility of the healthcare management that they make policy in this regard. The healthcare management needs to define some condition in which verbal order will be accepted. These conditions may be like as follow:

a. Lifethreateningsituations

b. Serious nature of patients conditions such that if medication is not administered it may lead to permanent harm or even death of the patient

c. Anti-diabetic drug orders

d. Reporting of critical test results(report in 15 min)

If we face any of the condition stated above then the procedure to take verbal order will be as followed:

• If the consultant is giving orders telephonically then we have to follow our READ BACK policy. During this condition we follow the steps define below –

a. The receiver (recipient) documents the complete order

b. The receiver (recipient) reads back the message as he/she has heard, written and interpreted it.

c. The sender or the individual giving the order confirms that such recording and interpretation of the order is correct & documents it

1. During shift change or handing over the patient to another staff

The risk of communication gap increases when the staffs hand over patient one to another. These situations occurs when –

a. During shift change

b. Inter Department patient transfer

c. Inter Hospital patient transfer

d. Shifted to OT

e. Shifted from Recovery Area

During these situations, to minimize the risk related to communication gap during shift change or during handing over the patient to another staff. Staff should follow the EFFECTIVE COMMUNICATION policy. Staff will handover patient according to ISBAR.

I – INTRODUCTION

Documented details of patient and handing over as well as taking over staff detail.

S- SITUATION

About the patient condition in which the patient is going to handing and taking over.

B- BACKGROUND

All detail regarding patient diagnosis, clinical history, comorbidities, treatment given and incident etc.

A -ASSESMENT

Details regarding patient vital record, RBS, Pain, Intake/Output, and Systemic Examination etc.

R- RECOMMENDATION

If any special instruction regarding patient care as patient diet, NPO, pending examinations and their reports pending medication, planned discharge etc. need to document under this column.

Goal:3

Improve the Safety of High Risk Medication

High risk medications are those that having heavy risk of causing significant harm when they are used in error. Although mistakes may or may not be more common with these drugs, the consequences of an error are clearly more devastating to patients.

To improve the safety of high risk medication, we have to strengthen our policy regarding high risk medication dispensing, storage, documentation, administration and monitoring. For these we may:

Safeties during dispense of high risk medication: Indent need to be verified by at least two personnel.

Safeties during storage of high risk medication: High Risk Medications need to be stored in a separate highlighted (often use red colour) place and these drugs should be locked.

Safeties during documentation of high risk medication: All high risk medication need to be highlighted when documented. These drugs should be easily recognized.

Safeties during administration high risk medication: When it is needed to administer any high risk medication to the patient, staff should follow 5 Rights of medication (Right patient, Right route, Right medication, Right dose, and Right time).

Safeties during monitoring high risk medication: All indicated high risk medication need to monitor after administration.

Goal:4

Ensure correct site, Correct - Procedure Correct - Patient Surgery

Patient needs more care when he/she undergone any surgical procedure. Surgical care of the patient is most essential part of healthcare. Patient safety needs to be ensured at each point as Pre-operative care, Peri-Operative care, and Post-operative care. To ensure the surgical safety we must follow:

a. Concerned surgeon/ team member will do surgical site marking with indelible marker pen.

b. The mark should be a circle or oval, remain visible after the application of skin preparation. It is desirable that the mark should also remain visible even after the patient is prepped ordraped

1st Check: OT staff nurse goes to the respective floor/ward/ ICU/ emergency to bring the patient to the respective OT. The nurse escorting the patient will carry out the check of following:

I. The patient's identity against the clinical records

II. The patient's identity and procedure against the clinical

records The patient's identity and procedure against the operating list that the correct body part has been marked in relation to the information in the clinical notes.

2nd Check: Prior to anesthesia, operating surgeon (or senior member of the team) will:

I. Inspect the site mark and check it against the patient's supporting documentation

II. Re-check imaging studies are available in the operating theatre or suite

III. Check that the correct implant is available (if applicable)

3rd Check/Time Out- Final Verification: Just before the actual procedure begins, a final verification will be performed as a part of "TIME OUT" by all team members present.

Time Out: A pause, just prior to performing a surgical or other procedure, during which any unanswered questions or confusion about patient, procedure, or site are resolved by the entire surgical or procedural

team. The circulating nurse will initiate the Time out procedure; members of the team will verbally verify the following:

a. Patientidentity

b. Procedure to be performed

c. Site of the procedure, noting the position of the patient

d. Presence of images (properly labeled and displayed)

e. Presence of required implants and any special equipment.

f. Availability of correct implants and any special equipment or special requirements

Documents and reports availability

Goal:5

Reduce the Risk of Healthcare Associated Infections (HAI)

It is the responsibility of healthcare management to prevent their patients from the Healthcare Associated Infection (HAI). In this regard healthcare need to be followed all HIC protocols guided by WHO & CDC. To prevent the patient from HAI the healthcare need to follow policies given below:

I. Hand Hygiene (Hand Rub, Hand Wash, Hand Scrub, and 5 moments of hand hygiene

II. Bundle Care (VAP, CAUTI, CLABSI and SSI)

III. Bio Medical Waste Management

IV. Cleaning, Disinfection and Sterilization

V. Cleaning surveillance

VI. Swab Cultures of Critical Care Areas

VII. Standard Precautions etc.

Goal:6

Reduce the Risk of Patient Harm Resulting From Falls

It is very important to reduce the risk of slip, trip and fall in the organisation because slip, trip and falls are lead to sentinel events. To reduce the risk of patient harm resulting from falls, the healthcare management has to keep the points in mind as given below:

I. Proper fall risk assessment need to be done for each patient

II. Vulnerable patient should not be alone

III. Side rails should be open.

IV. Frequent Monitoring needed for vulnerable patients and those patient who is having fall risk

V. All wheel chairs and stretchers should have safety belts

VI. Patient & Family education on slip, trip and fall

VII. Facility rounds on defined intervals

VIII. Regular maintenance of all facilities

IX. No manhole should be open

X. The terrace area should be covered with four feet boundary.

XI. Terrace area should be accessible by authorized personnel only.

QUALITY | SAFETY | WELLNESS

GOAL 1 — Identify Patient Correctly

SANRAKSHAN - Bar Coded Medication Administration Process to ensure correct patient Medication Administration
Ms.Padma Jayprakash ,Ms. Kahkasha, Dr Archana Bajaj, Ms. Soumali
Max Super Speciality Hospital Shalimar Bagh Delhi 110088

*"A drive to protect patient from medication errors and reduce adverse drug event"*

AIM

❑ Implementation of Barcode Medication Administration

❑ To Reduce Medication Error

❑ To sensitize Doctors and Nursing Staff about Medication Safety

Rationale

❑ BCMA uses barcodes to prevent human errors in the distribution of prescription medications at hospitals. It makes sure that patients receive the correct medications at the correct time by electronically validating and documenting medications

Process Flow
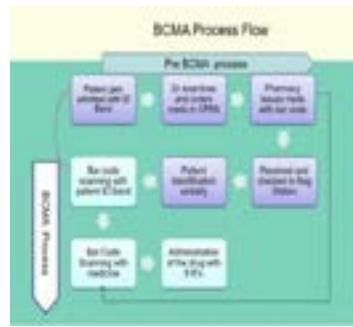
Key Drivers

Key to Success

Results
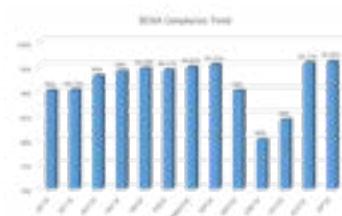
Conclusions

❑ BCMA Compliance implemented and Complaint by 95%

Strategy

❑ Identify bottle neck for non compliance in BCMA
❑ Strengthening BCMA process
❑ Identify drivers
❑ Improving Escalation pathway

Bibliography

Addition of electronic prescription transmission to computerized prescriber order entry: Effect on dispensing errors in community pharmacies.[Am J Health Syst Pharm. 2011]

A systematic review of the effectiveness of interruptive medication prescribing alerts in hospital CPOE systems to change prescriber behavior and improve patient safety.[Int J Med Inform. 2017]

Improving Patient Safety Through the Design and Development of a Computerized Provider Order Entry for Parenteral Nutrition Linked to a Barcode Medication Administration Record.[Stud Health Technol Inform. 2017]

Effect of e-prescribing systems on patient safety.[Mt Sinai J Med. 201

ISBAR -Tool for Effective Communication in Nursing Practice

Introduction

The Joint Commission reported poor communication is a contributing factor in more than 60% of all hospital adverse events they reviewed.

The ISBAR tool is regarded as a communication technique that increases patient safety and is current 'best practice' to deliver information in critical situations.

Need for the Study

It was observed that handover-takeover process was monotonous and unstructured leading to failure in effective communication between the RN.

Various reasons observed were as follows:

a. The existing handover format was just a checklist

b. Lack of space for documentation of vital information

c. Lack of standardised systemic method of handover takeover

d. Cannot provide the current patient picture

e. Handover form was never used as a reference

f. Random flipping of entire file to gather information

Hence the need for standardised structured handover tool was felt

Figure: a) Patient Handover Checklist

Figure: b) Live Video record of Handover-Takeover

Aim of The Study

Ensure effective communication during handover-takeover through the use of a structured tool

Objectives

a. To identify the time taken for handover

b. To create ISBAR tool with vital information

c. To educate nurses through simulation based training via videos

d. To create awareness among health care team members

e. To analyse the compliance of ISBAR tool documentation

f. To develop confidence in nurses through effective communication

Methodology

Study setting: SRCC Narayana Children's Hospital, Mumbai.

Participants: Registered Nurses

Research approach: Evaluative research approach Sampling technique: Non-probability purposive. Sample Size: 30 files

Tool: Structured Communication format-ISBAR

Process

a. Brainstorming on content of ISBAR sheet

b. Training of RN on ISBAR sheet-virtual and simulated

c. Sensitization of other disciplines regarding ISBAR sheet

d. Audit of documentation compliance and inspection of time required for handover in post phase

e. Analysis of the effectiveness of the ISBAR sheet

Virtual Recording Of Handover Through Isbar Tool

Benefits

1. Organisation

a. Effective communication between healthcare members minimising error in communication.

b. Elevates standard of care and organization safety.

c. Meets accreditation standards

2. Patient

a. Ensure patient safety

b. Ensure patient satisfaction.

c. Provide quality care to patients

3. Employee

a. Confidence in communicating effectively

b. Vital information available at a glance for reference

c. Ensure employee satisfaction

Results

Analysis and Interpretation of the data was based on the projected objectives of the study

1.Time taken for handover

The time taken for handover was reduced from 4.42 mins to 4.02 mins

2. Structured Communication Tool-ISBAR format

3.Educating nurses through simulation based training via videos

a. Training was conducted through video recording of handover in ISBAR format.

b. Note pad was circulated among RN

c. Ongoing Supervision of RN

4. Create Awareness among health care team members

a. Filled ISBAR template as a guide was displayed on departmental notice boards

b. WhatsApp communication to all healthcare team members regarding ISBAR

5.Analyse the compliance of ISBAR tool documentation

Documentation compliance of 98% was found in the month of December 2020 for 30 samples collected in Wards and ICU settings

6. Develop confidence in nurses

Health care team members i.e Nurse Managers,Consultants and RN found the tool extremely beneficial as

a. It was more reliable than the handover checklist which was existing in the system

b. Readily available data at a glance

c. Easy reference

RN were vocal in communicating patient information during rounds

A structured framework was available to initiate communication among healthcare team members

A narrative was written by an RN expressing the benefits of ISBAR format and the ease in giving handover-takeover with the format

Conclusion

ISBAR improved communication among RN to RN during handover-takeover and to consultations on patient rounds. The structured format helped to improve the accuracy of handover and takeover process

Future Scope

Initiate ISBAR communication in

a. Emergency codes

b. Telephonic conversations

c. Email

d. Among other healthcare team members-Doctors, Physiotherapist, Dietician

Improving shift report and Accuracy with ISBAR

K.A. Abitha , RN,SRCC Children's Hospital (Managed By Narayana Health)

MY EXPERIENCE OF USING ISBAR HANDOVER

Hello everyone, I am a Nurse working in SRCC managed by Narayana Health and I would like to share my experience of using ISBAR handover

A change from the regular routine is always difficult and annoying. Even today, nurses, are adaptive to the changes that the organization introduces for our betterment.

Florence Nightingale, who introduced nursing to this world through her compassion and care for the wounded soldiers, she barely brought any of the paper works which many of the institution are focusing on today. Many times, the moto of nursing is lost behind the amount of paper jobs that nurses do today.

Hence, it has been our continuous effort to make paper jobs go less and care of patients more. And, one of the efforts of doing so is the introduction to ISBAR .When this new format of giving and taking of handover was introduced, we had thought that this would be an addition to what we are doing already. Little did we know that it would be a helpful stuff.

GOAL 3

Improve the Safety of High Risk Medication

Dr. Deepmala Karodiwal & Mr. Rushikesh Raut.

Kamalnayan Bajaj Hospital
Aurangabad, Maharashtra, India

Safety Practices for High Risk Medications

Abstract

Aim - The aim of this study was to compare the trend of medication error related to high risk medications before and after re-implementation of preventive measures.

Methods: The retrospective data of high risk medication errors from 1 st September 2020 to 15 th December 2020 was collected and identified. Analysis of medication errors was done. Preventive measures were re-implemented to streamline the process.

Results: Frequency of high alert medication errors we found to be reduced considerably after development and implementation of preventive strategy.

Conclusion: Strategies developed for preventing high risk medication errors were successful.

Keywords: High risk medication, Medication errors, Adverse drug reaction, Body Surface area, Bio safety cabinet , Cold chain, Double lock, Verbal orders, Read back policy.

Introduction

A Medication Error (ME) is any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health care professional or patients .

As per article published by WHO in March 2017 News release GENEVA Approximately, 30% of problems occurring during hospitalization are related to medication errors. A number of studies have shown that medication errors are one of the main causes leading to disability and death in up to 6.5% of hospital admissions

As per data 43 million people are injured worldwide each year due to unsafe medical care of which India records 5.2 million medical injuries annually. Medication errors cause at least one death every day and injure approximately 1.3 million people annually in the United States of America alone.

Background

In a tertiary care 300 bedded hospital, numerous medicines are prescribed on daily basis for various types of patients out of which 50-55 patients are admitted to receive treatment using high alert medication. Hospital Drug formulary needs to be maintained for all type of medicines including high alert medicines. All these factors lead to an increase in the probability of errors related to high risk medication. A strong system to reduce and prevent the medication errors is required with more focus on high alert medication related errors due to seriousness of consequences.

Initially errors related to near misses were identified as

I.   Concentrated electrolytes and Chemotherapeutic drugs were more, as concentrated electrolyte and chemotherapeutic drugs were not verified, counter checked & documented by the nursing staff.

II. LASA medication errors were more frequent during verbal orders.

III. Storage of LASA drugs using separate labels and color coding was not appropriate.

IV. In case of insulin self-administration, verbal order from doctor to nurse, and RBS was not implemented.

QUALITY | SAFETY | WELLNESS

Materials & Methods

Pharmacotherapeutic committee's approved list of high risk medication was taken into consideration. Errors reported to the pharmacy, nursing staff, & clinical pharmacists during daily ward round were taken for the study.

Need of Study

Project Phase 1 (Problem Identification)

The data of high risk drugs related medication errors during 1st September 2020 to 15th December 2020 was collected. The stages of medication error i.e. rescribing error, transcribing error, dispensing error, indenting error, wrong dose, wrong drug, wrong route were identified and high alert ME rate was calculated using following equation.

$$\text{High Alert ME Rate} = \frac{\text{Number of High Alert Medication Errors} \times 100}{\text{Total no of Medication Errors}}$$

Phase 2 (Problem monitoring and elimination)

The collected medication errors were presented to the Pharmacotherapeutic Committee (PTC) of the hospital. The strategies for prevention of medication errors were constructed by PTC as per the causes of errors:

I. High alert drugs storage in pharmacy and wards separate with appropriate labeling.

II. Training for high alert drugs to duty doctors, pharmacy staff and nursing staff.

III. Updating of high alert drugs list, time to time.

IV. Regular audits for monitoring safety practices of high risk drugs

The target groups of constructed strategies included duty doctors, pharmacists, and nurses. The high alert ME were identified and calculated as mentioned previously. Reducing trend of medication errors related to high alert drugs was seen. The redeveloped prevention strategies focused on aspects like high alert drugs storage in pharmacy, routine training for high alert errors, proper communication with duty doctors, nursing staff and pharmacists.

Identification of High risk Medications : To help in identification of high risk medicines the acronym A-PINCH was developed.

A - Concentrated Antibiotics

P - Potassium & Concentrated Electrolytes

I - Insulin & its bi-products

N - Narcotics, Sedatives, Antidepressants, Antipsychotics, Anaesthetics, Skeletal muscle relaxants .

C – Chemotherapeutic Drugs

H - Heparin its derivatives, Ionotropes, & Thrombolytics

Cytotoxic medications: Medication Errors related to Chemotherapeutic medication were the most serious. For chemotherapy protocol formats were developed with details of dose calculation with BSA and standard dose. Protocol is signed by consultant & the same is re-assured by the trained chemo nurse and clinical pharmacist. During Chemotherapy patients are observed by nurse for ADR. To avoid exposure related issues all dilutions are strictly prepared in biological safety cabinet (class II, Type B1) for safety of medicine and environment.

Body Surface area(BSA)

$$\text{BSA} = \frac{\sqrt{\text{Ht in cm} \times \text{Wt in Kg}}}{3600}$$

Concentrated electrolyte management: Administration of concentrated electrolyte to patient is double signed by nurses in the drug chart. Caution label was prepared and stuck on every concentrated electrolyte before dispensing from IP Pharmacy. No verbal order was allowed. Clinical pharmacist reviewed the medicine order for dose and dilution instruction and indication before administering the medicine.

Insulin: Insulin regulates the metabolism of carbohydrates, fats and proteins by promoting the absorption of glucose from the blood into fat, liver and skeletal muscle cells. Some of the most common insulin related problems that can occur are over administration, diet changes and verbal orders. Patient refuses to eat or forget to eat or have an unexpected mealtime delay but the nurse administers the insulin. If the patient is given a morning dose at night, or vice versa can happen if any verbal orders in case of insulin are given. Strict policy of verbal orders was implemented. Education related to administration of insulin for nursing staff are by made by Diabetologist. To maintain storage conditions of Insulin, after being dispensed from Pharmacy Department cold chain is maintained along with it until it arrives in ward & after administration of the same it is being stored in refrigerator in wards.

Heparin: In administration of Heparin, hemorrhage can occur at virtually any site in patients. An unexplained fall in hematocrit, fall in blood pressure, severe hypertension major surgery or patient diagnosed with hemophilia, thrombocytopenia and some vascular diseases. Heparin dose is continuously monitored by clinical pharmacist. Dosage was regulated by frequent blood coagulation tests like PT -INR. Opening and discard label was made compulsory for storage of medicine.

Narcotics: These are the drug having capacity of addiction hence may get

abused in hospital by healthcare workers or patients. Due to this narcotics have to be monitor more specifically in hospital. Prescription related to Narcotics & Skeletal muscle relaxants are accepted in pharmacy department only if they contain the following;

1. Name of patient
2. Name of Drug
3. Dose of Drug
4. Quantity
5. Date
6. Name & registration number of Consultant
7. Stamp & Signature.

All prescriptions related to narcotics were strictly under observation of clinical pharmacist and pharmacy Manager. Duplicate prescription is used to issue narcotics to patient. The administration of narcotics dose is under observation of Intensivists & Anaesthetists. Documentation of Narcotics issued in wards is being maintained through verification by quantities of used ampoules. Narcotics are stored in double lock and prescription should be in capital letters and written by registered Consultants only. The study found no errors as protocols were being followed.

LASA drugs storage: It was observed that LASA drugs were put in the same place or near each other. The Pharmacy Department modified drug shelves and rearranged the drugs. From our observation Tall man lettering was not found to be very effective for storage of medications in Pharmacy department hence LASA were separated by colour coding to prevent LASA medication errors . In addition, the printed reflective sticker was used for identification LASA drugs were kept separately in rack (Image 1). Updated list of LASA medication

on the basis of medication errors was circulated in wards for implementation. The Pharmacotherapeutic committee considered the drug items that may cause medication errors such as drug that had two strengths and same drug with multiple brands.

Training for high alert medications

Workshop was conducted for safety practices of high risk medications for duty doctors and nurses.

Training Topics:

I.   Rights of Medication

II. Name of Drugs to be mentioned in CAPITAL letters to avoid misinterpretation / confusion

III. Usage of Decimal points

    a. 10 mg should be mentioned as 10 mg & not 10.0 mg

    b. 0.1 mg should be mentioned as 0.1 mg & not .1 mg

IV. Frequently occurred errors found for example:

    a. Tab. Doxolin (Doxophyline) as brand name and Tab. Doxy(doxycycline) as generic & brand name get confused hence staff were trained for the search of Generic and Brand names of drugs from Hospital's drug formulary and online medical integrated system.

    b. Inj. Heparin 5000 IU TDS was being rescribed to patient but nursing staff did not identified the correct strength & instead of administering

1 ml out of 5 ml from vial of Inj. Heparin 25000 IU, Whole Vial of 5 ml was being administered to the patient.

c. For duty doctors error spotted was wrong transcription for example Inj. Biotrexate 15 mg was transcribed as Inj. Biotrexate 150 mg .

V. For counter check of dose transcribed being counter checked by using body surface area based calculations as

$$BSA = \frac{\sqrt{Ht\ in\ cm\ x\ Wt\ in\ Kg}}{3600}$$

VI. Calculated Pediatric doses are being counter checked based on Child's, weight ,Childs age in months & childs age in years.

I. Clark rule

   a. It uses Child's Wt

   b. Who are less than 1 years of age

   c. Wt in Pounds & never in Kg

   d. Child's Dose =

$$\frac{\text{Average adult dose x Child's weight in pounds}}{150}$$

II. Fried's rule

   a. Who are less than 2 years of age

   b. It uses age in months

   c. Child's Dose =

$$\frac{\text{Average adult dose x Child's age in monthsa}}{150}$$

III. Young's rule

   a. Children with 2 or more years

   b. Child's Dose =

$$\frac{\text{Average adult dose x Child's age in monthsa}}{\text{Childs age in years +12}}$$

VII. For correct administration of medications IV flow rates have been displayed in the wards.

VIII. Nurses, duty doctors, pharmacists are trained for verbal order policy & reimplementation of read back policy. Reconfirmation of the medicine order from consultant regarding any discrepancy/doubt & repeat back the dose digits. For example: one five for 15 and five zero for 50.

To prevent medication errors regular Medication Safety round were conducted by Clinical Pharmacist and on the job training is given to nurses and duty doctors. During the round errors were identified and on the spot education are given to concerned persons.

Table 1. Sound alike list of High risk drugs

SR. No.	SOUND ALIKE 1S	OUND ALIKE 2
1.	CYCLO PHOSPHAMIDE	CYCLOC EL / CYCLO SPORINE /CYCLO KAPRON
2.	LARI NATE	LARINJECT
3.	DOXO RUBICIN	DOXO FYLLINE / DOXO CYCLINE
4.	VINB LASTIN	VINC RISTIN
5.	CISPLATIN	CARBOPLATIN
6.	DOXORUBICIN	DAUNORUBICIN
7.	CALAPTIN	CIPLACTIN
8.	PACLITAXEL	DOCETAXEL
9.	OXALIP ATIN	OXYT OCIN
10.	THALI DOMIDE	LINALI DOMIDE
11.	PROCARBAZINE	DACARBAZINE
12.	UROKINASE	STREPTOKINASE
13.	RITUXIMAB	TRASTUZUMAB
14.	XYLO TIN	XYLO CAINE
15.	HOSIT	STROCIT
16.	XYLO TIN	XYLO CAINE

Updating High risk medications list

New updated list for high risk drugs was introduced by combined efforts of doctors, pharmacists and nursing department as per the drug availability and trend of errors. Updated list was distributed to all wards and pharmacy .

Audit by clinical pharmacist

Ward rounds were conducted on daily basis and error found were informed to concerned doctors and corrected immediately and summarized reports were discussed in Pharmacotherapeutic Committee.

Audits

 a. High risk Drug audit

 b. Verbal order audit

 c. Prescription Audit

Tool kit for High Risk Drugs		Tool kit for Verbal Order		Tool kit for Prescription Audit	
PARAMETER	YES/ NO	PARAMETER	YES/ NO	PARAMETER	YES/NO
MR NO OF PATIENT		NAME OF PATIENT		NAME OF THE PATIENT	
NAME OF CONSULTANT		NAME OF CONSULTANT WHO GAVE ORDER		PATIENT REGISTRATION NUMBER	
WARD NAME		NAME OF STAFF WHO ADVISED ORDER		NAME OF DRUGS	
NAME OF HIGH RISK DRUG		NAME OF STAFF WHO RECEIVED ORDER		DOSE	
INDICATION FOR HIGH RISK DRUG		WARD NAME		ROUTE	
IS HIGH RISK DRUG VERIFIED BY ASSIGNED NURSE?		DATE & TIME OF VERBAL ORDER		FREQUENCY OF ADMINISTRATION	
NAME OF ASSIGNED NURSING STAFF		WHAT WAS THE PURPOSE OF CALL TO CONSULTANT		MEDICATION ORDERS	
IS HIGH RISK DRUG COUNTER CHECKED BY SENIOR NURSE ?		NAME OF MEDICATION ADVISED BY DOCTOR		I. LEGIBLE & CAPITAL LETTERS	
NAME OF SENIOR NURSING STAFF		DOSE ADVISED BY DOCTOR		II. DATE & TIME	
LABELLING IS DONE FOR HIGH RISK DRUG		READ BACK POLICY WAS FOLLOWED OR NOT		III. SIGN OF PRESCRIBING DOCTOR & REGISTRATION NUMBER	
IS ADMINISTRATION CHART DOUBLE SIGNED AFTER ADMINISTRATION?		TO AVOID CONFUSION SPELLING WAS SPELLED OR NOT		DRUG ALLERGY MENTIONED	
PATIENT IS BEING MONITORED AFTER ADMINISTARTION OF HIGH RISK DRUGS		IS VERBAL ORDER DOCUMENTED IN MEDICAL RECORD?		PRESENCE OF THERAPEUTIC DUPLICATION	
REMARKS IF ANY		VERBAL ORDER FORM IS BEEN SIGNED BY DOCTOR WHO GAVE ORDER WITHIN 24 HRS		POSSIBILITY OF DRUG - DRUG & FOOD DRUG INTERACTIONS MENTIONED	
				ERROR PRONE ABBREVIATIONS USED	

Result and Discussion

Figure 1 shows the comparison of no. of medication errors related to high risk medication in Phase 1 & Phase 2 study. This figure show that the number of medication errors related to high risk medication from 16th December 2020 till date is reduced to one. It is observed that total error also somewhat decreased due to continuous training of staff nurses, duty doctors, & pharmacists on Safety Practices of High Risk Medications & daily surveillance round by clinical pharmacist for the implementation, monitoring & audit for safety practices of high risk medications is consistent.
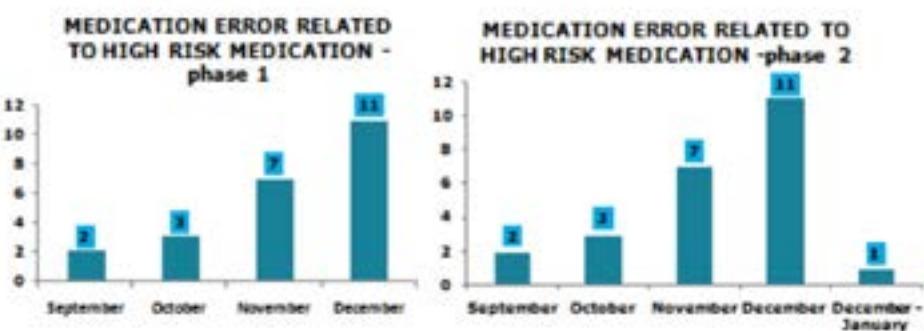
Additional Measure

Staff who prevents a medication error form occurring are rewarded and encouraged in a daily routine round.

Conclusion: The developed strategies for the prevention of high alert medication errors were successful. However, the surveillance of the high alert medication error rate should be further monitored for continuous effectiveness.

Abbreviation

I.   Medication Error : ME

II.   Body Surface Area : BSA

III. Random Blood Sugar: RBS

IV.   Adverse Drug Reaction: ADR

V.   Pharmacotherapeutic Committee: PTC

VI.   Look Alike and Sound Alike : LASA

VII. Weight: Wt

VIII. Height: Ht

References

I.   Medication Safety in High-risk Situations. Geneva: World Health Organization; 2019(WHO/UHC/SDS/2019.10).

II.   Remingtons essential of Pharmaceutics - Edited by Linda A. Felton, Chapter 9 - Metrology and Pharmaceutical Calculations.

III. https://www.expresshealthcare.in/healthcare-it/medical-errors-thethird-leading-cause-of-deaths/420524/

IV.   NABH 4th edition December 2015 Chapter 4 management of medication – standard 2 – Hospital Formulary, standard 3 – Storage of medication, standard 4 – Rational prescription of medication, standard 8 – Near misses, medication errors & Adverse drug reaction are analysed, standard 9 – Usage of Narcotic Drugs & standard 10 – Usage of Chemotherapeutic agents.

V.   Joint Commission on Accreditation of Healthcare Organizations (2001) High Alert Medication drug names.

VI.   ISMP Medication Safety Alert! Volume 6, Issue 21, October 17, 2001.

Riya M Rajan

OT Staff Nurse,
Giridhar Eye Institute

Ensuring Safe Surgery

An instantly recognized mark for surgical-site identification and involving the patient in the marking process to be done.

A checklist or other process to verify preoperatively the correct site, correct procedure, and correct patient and all the documents and equipment needed to be on hand, correct, and functional.

The full surgical team to conduct and document a time-out procedure just before starting a surgical procedure.

Policies and procedures to be developed that support uniform process to ensure the correct site, correct procedure, and correct patient, including medical and dental procedures done in the settings other than the operating theatre.

Mrs. Mariyamma Thomas
Mrs. Suneetha V
Mrs. Nagalakshmi. Y

Department of Hospital Infection Control, KIMS Hospital, Secunderabad

"Effectiveness of Insertion and Maintenance Bundles in Preventing Peripheral Intravenous Catheter Related Blood Stream Infections in Selected Critical Care Unit Patients"

Abstract

Peripheral venous catheters (PVCs) are some of the most commonly utilized medical devices in health care settings. Main uses of a peripheral intravenous catheter are the administration of intravenous fluids, blood sampling, administration of medications and blood products. Despite the advantages, PIC insertion is associated with some complications. The most common complication associated with PIC insertion is phlebitis with reported incidence ranges from 25% to 59%. Phlebitis not only causes patient discomfort and frequent catheter change it may also cause further complications like cellulitis, septicemia, DVT, and make the patient stay in the hospital for a longer time and increase the cost of health care.60 (PIV) insertion and maintenance bundles checklist of patients, admitted in selected critical care units patients evaluated from (May 2020 to October 2020) 6 months data was collected by examining patients PIVA bundles, their feedback and observations of peripheral intravenous catheter insertion and maintenance practices of their concerned staff nurses through PIVC care bundle assessment checklist as per the CDC guidelines. Data reveals that, blood stream infections are not being identified but inflammatory changes and documentation errors are found. In coherence to the objectives the study Insertion practices are identified 80%, dressing practices 88%, implementation of flushing practices at 63.3% and with nursing assessment and care practice- errors, inflammatory changes are identified at 53.3% collectively under various parameters such as Swelling, pain, redness leakage, occlusion. In order to prevent peripheral intra venous catheter related blood stream infections PIVA bundles and insertional maintenance, assessment bundles are effective.

Introduction

Peripheral venous catheters (PVCs) are some of the most commonly utilized medical devices in health care settings. Primary care physicians are the first responders in majority of the cases that reports to hospital. One of commonly performed and at times lifesaving procedure performed in hospital is placement of peripheral intravenous catheter (PIC). Incidence rate of intravenous catheter placement in a patients admitted to hospital is about 50%. Main uses of a peripheral intravenous catheter are the administration of intravenous fluids, blood sampling, administration of medications and blood products.

Despite the advantages, PIC insertion is associated with some complications. The most common complication associated with PIC insertion is phlebitis with reported incidence ranges from 25% to 59%. Phlebitis not only causes patient discomfort and frequent catheter change it may also cause further complications like cellulitis, septicemia, DVT, and make the patient stay in the hospital for a longer time and increase the cost of health care.

Intravascular catheters are indispensable in modern-day medical practice, particularly in intensive care units. Although such catheters provide necessary vascular access, their use puts patients at risk for local and systemic infectious complications, including local site infection, catheter-related bloodstream infections (CRBSI), septic thrombophlebitis, endocarditis, and other metastatic infections (e.g., lung abscess, brain abscess, osteomyelitis, and endophthalmitis).

The catheter retained in a blood vessel is the most common cause of bloodstream infections, and catheter-related bloodstream infection (CRBSI) has been the subject of extensive surveillance and research.

Blood stream infection (BSI) is one of the most devastating preventable complications in Critical Care Units. It has far-reaching consequences resulting in prolonged length of hospital-stay, high costs to the individual and exchequer, and, in many instances, loss of life.

Phlebitis is an inflammation of the vessel wall and it manifest as localized pain, redness, edema and palpable venous cord. Factors contributing to development of phlebitis are divided into four main groups namely,

I. Patient factors such as age, gender and underlying conditions;

II. Chemical factors such as type of drugs and fluids;

III. Mechanical factors such as catheter material, size and duration of cannulation;

IV. A health professional practice.

The research study on **"assess theeffectiveness of insertion and maintenance bundles in preventing Peripheral Intravenous catheter related blood stream infections in selected critical care unit patients"** conducted

in order to analyse the effectiveness of practices initiated by health care providers in the hospitals in relation to peripheral intravenous catheter insertion and the way these practices are implemented and follow to mitigate the infections and inflammation of blood vessel which are an outcome if not followed.

Problem Statement

A prospective study to assess the effectiveness of insertion and maintenance bundles in preventing Peripheral Intravenous catheter related blood stream infections in selected critical care unit patients in KIMS Hospitals Secunderabad.

Aims/Objectives:

I. To assess the Peripheral Intravenous Catheter related to blood stream infection among patients in selected critical care units

II. To evaluate the effectiveness of Insertion and Maintenance Bundle in Preventing Peripheral Intravenous Catheter related to blood stream infection in critical care unit patients.

Methodology

A quantitative approach with prospective observational research design was carried out to assess the effectiveness of insertion and maintenance bundle in preventing peripheral intravenous catheter related blood stream infection in selected critical care units patients 60 (PIVC) insertion and maintenance bundles checklist of patients, admitted in selected critical care units patients evaluated from (May 2020 to October 2020) 6 months data was collected by examining patients PIVA bundles, their feedback and observations of peripheral intravenous catheter insertion and

maintenance practices of their concerned staff nurses through PIVC care bundle assessment checklist as per the CDC guidelines.

Findings and Results

To achieve the objective of the study data was collected and analyzed under following sections-

> **Section-I:**

PIVC Insertion Practice Elements

> **Section-II:**

PIVC Dressing Practice Elements

> **Section-III:**

PIVC Flushing Practice Elements

> **Section-IV:**

PIVC Nursing Assessment and Care Practice Elements
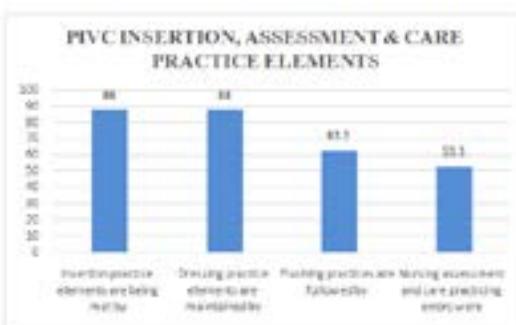
Section-I: Insertion Practice Elements

Insertion practice elements assessment data results revealed that practices related to insertion of peripheral intravenous catheter among 60 patients with peripheral intravenous catheters and their PIVA bundles and PIVC assessment and care checklist`

The Insertion practice elements are being met by 88% out of 100% .

The observations are as follows.

I. Usage of Sterile transparent IV dressings is 92.5%.

II. During insertion hand washing practice was met by 65%.

III. Alcohol based hand rubs are available at bed side was only 85. %

IV. Skin antisepsis with single use CHG based application practice was 92%

V. Insertion site is cephalic or basilic vein for adults 100%

VI. Extensions used to avoid manipulations and types of extension were met by 94%

VII. Split septum needleless connectors used and scrubbed before each use was 75%

VIII. All tubing clean of blood/drugs was met by 98.3%
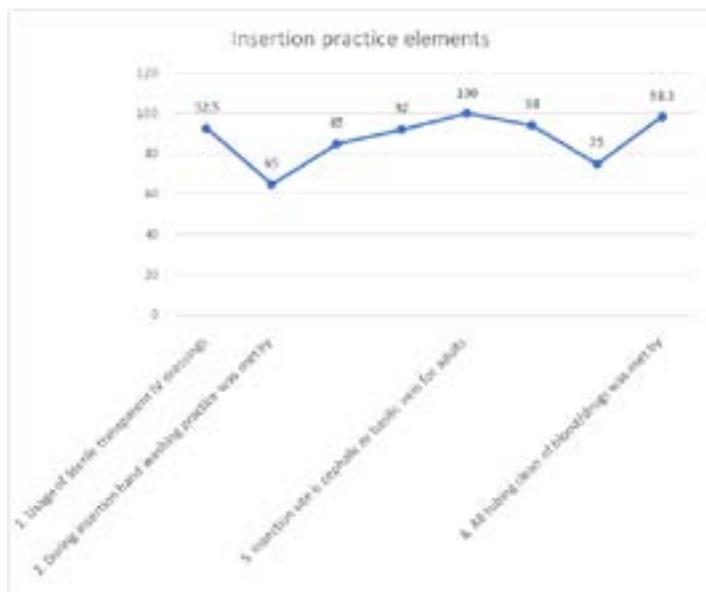
Section-II: Dressing Practice Elements

As per the observations dressing practice elements are maintained by 88%.

I. Dressing practice elements assessment checklist consist of 4 items such as Loose, moist, soiled and type of dressing used after intravenous catheter.

II. Without Loose dressing it is identified as 98%

III. Without Moist dressing it is identified as 90%.

IV. Without Soiled dressing it is identified as 66.4%.

V. Highest being Tegaderm with 97% while Dyno-Plast dressing was identified as lowest with 3%.
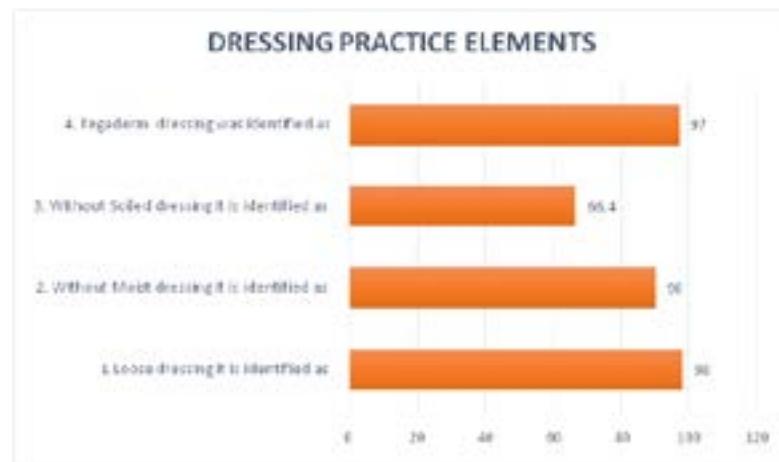
Section-III: Flushing Practice Elements

Flushing practice elements assessment checklist consist of 3items which are related to flushing practices before and after IV injection through peripheral intravenous catheter.

Observations regarding Flushing Practice elements are as follows.

I. Single use prefilled 0.9% NS flushing usage is identified as 97%.

II. Ideal amount and frequency of flushing is followed by 50%.

III. Flushing before and after IV injections is followed by 43%.

Overall flushing practices are followed by 63.3%
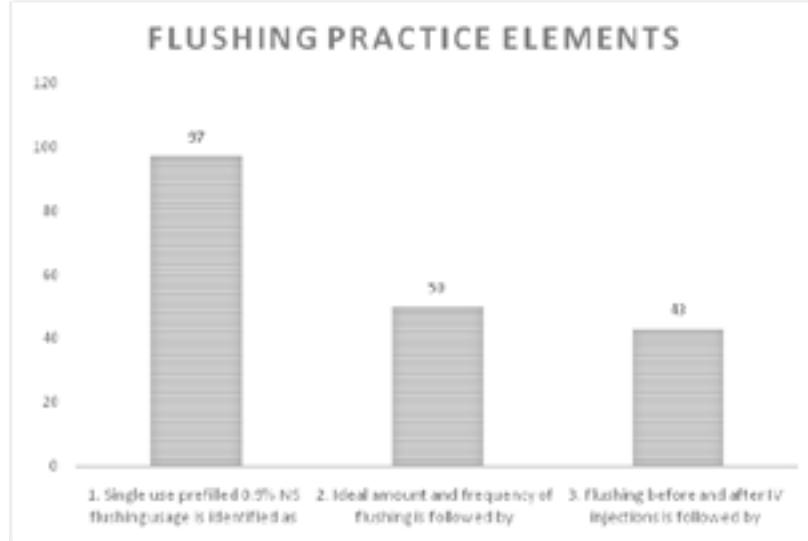
Section-IV: Nursing Assessment and Care Practice Elements

Nursing assessment and care practice elements results found that incident rate of nursing assessment and care practicing errors were 53.3% collectively under parameters.

I.   Routinely assessed catheter patency by heath care providers is 80%

II.   Proper practice flushing protocols and proper documentation of procedures are followed by 53.4%.

III. Educate and engage patient in PIVC assessment and care is followed by 7 %.

IV.   Unused lines are clamped and Closed IV sets used are 96.6%.

V.   Assessment for PIVC complications such as inflammatory changes (Swelling, pain, redness leakage, occlusion) are identified as 53.3%.

NURSING ASSESSMENT AND CARE PRACTICE ELEMENTS

Implications

Hospital Administration: The study findings enlighten the areas, nature & types of peripheral intravenous catheter insertion, assessment, care and document errors. It can be helpful for hospital administrators those are involved in quality assurance and quality assessment activities to identify and bridge the slips, lapses, or mistakes related to peripheral intravenous catheter insertion, assessment, care and document errors.

Medical & Nursing Education: On the basis of research findings, interventions & strategies should be primarily focused on health care professionals, especially physicians and nurse's education & training to minimize the incidence of peripheral intravenous catheter insertion, assessment care and document errors, to create a safe and cooperative working environment.

Medical & Nursing Practice: The study findings reveal the faults and errors in peripheral intravenous catheter insertion, assessment care and document process that raise the demand for more focused medical and nursing practice to strengthen the defense systems of hospital and minimize the harms occurring to the patient.

Conclusion: Blood stream infections are not being identified but inflammatory changes and documentation errors are found. In coherence to the objectives the study Insertion practices are identified 80%, dressing practices 88%, implementation of flushing practices at 63.3% and with nursing assessment and care practice- errors, inflammatory changes are identified at 53.3% collectively under various parameters such as Swelling, pain, redness leakage, occlusion. In order to prevent peripheral intra venous catheter related blood stream infections PIVA bundles and insertional maintenance bundles are effective.

References

I.   Alexandrou E, Ray Barruel G,Carr PJ, Frost SA, Inwood S, Higgins N, et al, Use of short peripheral intravenous catheters:Characteristics, management, and outcomes worldwide. J Hosp Med 2018:13(5). https://doi.org/10.12788/jhm.3039.

II.   Marsh N, Webster J, Larson E, Cooke M, mihala, Rickard CM. Observational Study of peripheral intravenous catheter outcomes in adult hospitalized patients: a multivariable analysis of peripheral intravenous catheter failure. J Hosp Med 2018; 13(2):83-9. https://doi.org/10.12788jhm.2867.

III. (3) Umschied CA, Mitchell MD, Doshi JA, Agarwal R, Williams K, Brennan PJ. Estimating the proportion of health care – associated infections that are reasonably preventable and the related mortality and costs. Infect control Hosp Eppidemoil 2011:32(2):101-14. .https://doi.org/10.1086/657912.

IV.   Zing W Cartier V, Inan C, Touveneau S, Theriault M, Gayet -Ageron A,et al. Hospital wide Multidiscilinary ,Multimodal intervention programme to reduce central venous catheter-Associated bloodstream infection. Plos One.2014;9;e93898. Available from. https://doi.org/10.1371/journal.pone.0093898.

V.   European Centre for Disease prevention and Control. Surveillance report: Point Prevalence survey of healthcare associated infections and antimicrobial use in European acute care hospitals. Stockholm: ECDC,2013; Available from: http://ecdc.europa.eu/enpublications/healthcare associated -infections-antimicrobial -use-PPS.pdf.

VI.   Harbarth S,Sax H, Gastmeier P. preventable proportion of nosocomial infections: an overview of published reports. J Hosp Infect 2003;54:258-266.Available from: https://doi.org/10.1016/S0195-670(03)00150-6.

GOAL 6 Reduce the Risk of Patient Harm Resulting From Falls

DR. RELA INSTITUTE & MEDICAL CENTRE
A Multi-speciality Quaternary Care Hospital

rela institute

BEST PRACTICES FOR FALL PREVENTION

Our hospital has committed towards patient safety.
As part of our International Patient Safety Goal 6 - Reduce the risk of patient harm resulting from Falls have devised many best practices, which are mentioned below.

1 Hoarding for Propagation

A close snooze on the bedside for reinforcing patient to ensure safety by his / her own will.

A close call for registered nurse to be alert on attending the patient promptly.

2 Fall Risk Zone Poster & Safety Tips

Fall risk Zone poster have been displayed in all identified High-risk locations along with fall prevention safety tips which is in bilingual for easy understanding

3 Fall Risk Tags

Medium Risk   High Risk

Alarming stickers for triaging the patient accordingly based on fall risk score *(beds, wheelchair, stretcher).*

4 Manoeuver of Do's & Dont's on Wheelchair to imbibe the knowledge of end user

5

Cognizance of patient family well being on deterrence of fall displayed all over the hospital premises.

6

Bilingual display on washroom safety tips for reducing the incidence of fall among patient and bystanders across the hospital.

7

Sentience on mother and care givers for safe handling of newborns.

8 New Borns safety tips for babysitters

9 Night Fall Prevention Videos

Displayed by RN's to give awareness among patients and their relatives to prevent fall at night.

AUDIT CHECK LIST / TOOL

10

- To oversee the safe practices of fall among registered nurse
- Continuos monitoring and assessment ensures quality and safety culture
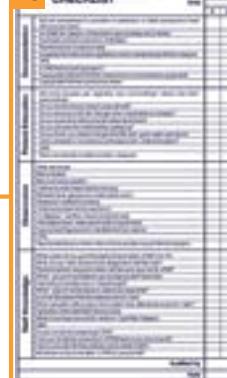
11 WHEELCHAIR & STRETCHER AUDIT CHECKLIST

1	WHEELCHAIR		
1.1	LOCATION		
1.2	CODE		
1.3	TYPE		
1.4	WHEELLOCK		
1.5	WHEELS		
1.6	SAFETYSTRAPS		
1.7	FOOTBOARD		
1.8	RUST		
2	STRETCHER		
2.1	LOCATION		
2.2	TYPE		
2.3	CODE		
2.4	WHEELS		
2.5	WHEELLOCK		
2.6	HEIGHT|ELEVATOR		
2.7	HEAD ELEVATOR		
2.8	SIDERAILS		
2.9	SAFETYSTRAPES		
2.1	RUST		
2.11	MATRESS		
	ANY REMARKS		
Sign Patient Safety Nurse:			

- Periodically data collection done to assess the durability of Wheelchair & Stretchers based on patient commutation.
- The non-compliance of this audit ensure for immediate CAPA, their by patient safety is guaranteed

12 VULNERABLE PATIENT CARE AUDIT FORM

- Fall could be reduced as a result of this audit
- Mandatory safety measures will be ensured in patient care

13

AUDIT ON RESTRAIN CONSENT AND APPLICATION

Continuous governing ensure the use of restrain to prevent self destruction in any manner.

Outcome: Incidences of Fall, 2020 *(last 5 month data)*

Proudly Exhibited by Nursing Directorate, Dr. Rela Institute & Medical Centre

QUALITY | SAFETY | WELLNESS
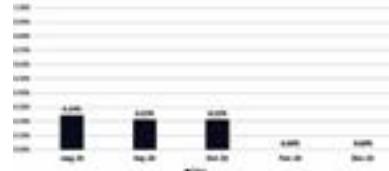
With The Strong Commitment and Regular Trainings Lets Achieve the IPSGs!!!

In every healthcare facility, the chances of occurring errors is similar. In a big healthcare setup with the perfect manpower, the errors are identified but in small one the same are unknowingly hidden. The implementing IPSGs means bringing an effective system in the facility to create safe and error free environment for their patients..!!

Let's confidently implement the International Patient Safety Goals (IPSGs)!

Identify patients correctly — **01**
1. For all purpose always use full name of the Patient
2. Register every patient with UID (Unique Identification No.)
3. Tie Patient with ID bands containing full name & UID No.

Improve effective communication — **02**
1. Use ISBAR for accurate handover and transfer the information
2. Provide planned & detailed induction training programme
3. Organize training on communication skills for every staff

Improve the safety of high-alert medications — **03**
1. Follow ISMP's High-Alert Medications (HAM) list and updates
2. Appropriately display the list & keep HAMs under lock & key
3. Administer HAM's following all R's with proper double check

Ensure safe surgery — **04**
1. Follow & implement WHO's Surgical Safety Checklist
2. Follow & implement NABH OT Air Conditioning Guidelines
3. Regularly conduct the training for very staff and doctor

Reduce the risk of health care-associated infections — **05**
1. Prepare a HIC (Hospital Infection Control) Team & Committee
2. Organize training on HIC for every staff (Repeat Six Monthly)
3. Promote WHO's Hand hygiene Techniques & Moments

Reduce the risk of patient harm resulting from falls — **06**
1. Prepare a Hospital Safety Management Team & Committee
2. Organize training on safety policies (include in Induction also)
3. Educate & promote raising on incident reporting form

The only purpose of the IPS Goals is to improve the overall patient safety in the Healthcare facility. Identifying patients correctly makes sure that each patient gets the correct treatment. Effective communication reduces the every potential error. ISMP (Institute for Safe Medication Practices) guideline helps safe medication administration. CDC (Centres for Disease Control and Prevention) and World Health Organization (WHO) use proven guidelines to prevent infections that are difficult to treat. WHOs surgical safety checklist prevents mistakes in surgery.

All required to achieve these goals is the TOP Management's strong commitment and regular trainings to their every staff including doctors. An appropriate display of these goals in hospital's OPD and IPD areas can be effective way to educate everyone. Always remember to communicate the achieved success in the form of data display online and offline ways to their staff, patient and vendors. This will increase the confidence of implementing the IPSGs!!!

Nayana Das & Riya Varghese

Executive, Department of Quality, MVR Cancer Centre And Research Institute, Kozhikode

A Review on The Measures Taken to Minimize The Noncompliance on IPSGS at MVR Cancer Centre and Research Institute, Kozhikode

Abstract

The purpose of this study was to integrate these six core goals of IPSG which focus on patients safety overall. So, if we work on these six IPSG goals we can definitely have a better impact and outcome in terms of patient safety. Patient safety is one of the essential components to consider for the healthcare delivery system. As such, various programs are entered by healthcare institutions to monitor their services including patient safety goals in order to achieve high patient satisfaction rate. One of these programs is called accreditation. Accreditation is an internationally recognized evaluation process used to assess, promote and guarantee efficient and effective quality of patient care and patient safety. This study will provide valuable information regarding the awareness of IPSG and its implementation in the in the Hospital. In a nutshell, following International Patient Safety Goals (IPSGs) in clinical areas would reduce number of issues, like for staff it would help them to minimize the risk of errors and for patients to decrease their burden of healthcare and acquiring quality of care. This project was very helpful in terms of understanding the noncompliance to the IPSGs and ways they can overcome it. This would also help the staff to improve the quality and safety of patient care as these are the two integral parts of hospital.

Keywords

International Patient Safety Goals, Joint Commission International (JCI), Root Cause Analysis (RCA), Corrective and Preventive Action (CAPA), Incident Reporting (IR), World Health Organization (WHO)

Introduction

1.1 Introduction to International Patient Safety Goals (IPSGs):

The safety and quality of patient care are fundamental issues for every healthcare organization that aims for the provision of safe care, with a high degree of quality, based on the expectations of the community population. Patient safety remains a priority issue on the agendas of healthcare practitioners, hospitals, and governments. Moreover, patient safety is a crucial principle of healthcare, and almost every factor in a healthcare setting is associated with some degree of risk to patient safety. Thus, the ultimate aim in all healthcare settings is the promotion of patient safety, which constitutes one of the largest threats to the quality of care delivered. Patients must be able to obtain excellent care, under safe clinical practice conditions, which could contribute to improvements in the patient's condition and treatment plan. In addition, the provision of safe, effective, and quality healthcare is necessary for many healthcare facilities and organizations, to better serve patients and family. In the 21st century, trends for greater transparency and performance monitoring have become established in many industries. There is no doubt that healthcare systems across the world now recognize the need to pay attention to patient safety. The IPSGs

(International patient safety goals) represent proactive strategies to reduce risk of medical error and reflect good practices proposed by leading patient safety experts. Incorporating these new tools into our requirements is a significant step. JCI introduced the IPSGs in 2006 and surveyors have been evaluating compliance with these goals during accreditation surveys in 2006, but these findings have not affected the accreditation decision. Beginning 1 January 2007, hospitals accredited by joint commission international will be required to display compliance with the following international patient safety goals.

Almost 50 percent of Joint Commission standards are directly related to safety, addressing such issues as medication use, infection control, surgery and anesthesia, transfusions, restraint and seclusion, staffing and staff competence, fire safety, medical equipment, emergency management, and security. These standards also include specific requirements for the response to adverse events; the prevention of accidental harm through the analysis and redesign of vulnerable patient systems (e.g. the ordering, preparation and dispensing of medications); and the organization's responsibility to tell a patient about the outcomes of the care provided to the patient— whether good or bad.

Goal:1
Identify Patients Correctly

Use at least two (2) ways to identify a patient when giving medicines, blood or blood products; taking blood samples and other specimens for clinical testing, or providing any other treatments or procedures. The patient's room number cannot be used to identify the patient.

Goal:2
Improve Effective Communication

Implement a process/procedure for taking verbal or telephone orders or for the reporting of critical test results that requires a verification "read-back" of the complete order or test result by the person receiving the information. NOTE: Not all countries permit verbal or telephone orders

Goal:3
Improve the Safety of High-alert Medications

Remove concentrated electrolytes (including, but not limited to, potassium chloride, potassium phosphate, sodium chloride >0.9%) from patient care units.

Goal:4
Eliminate Wrong-site, Wrong-patient, Wrong-procedure Surgery

Use a checklist, including a "time-out" just before starting a surgical procedure, to ensure the correct patient procedure and body part. Develop a process or checklist to verify that all documents and equipment needed for surgery are on hand and correct and functioning properly before surgery begins. Mark the precise site where the surgery will be performed. Use a clearly understood mark and involve the patient in doing this.

Goal:5
Reduce the Risk of Health Care–acquired Infections:

Comply with current published and generally accepted hand hygiene guidelines.

Goal:6
Reduce the Risk of Patient Harm Resulting from Falls

Assess and periodically reassess each patient's risk for falling, including the potential risk associated with the patient's medication regimen, and take action to decrease or eliminate any identified risks.

Literature Review

A research study was done on International standards of patient care in King Hussain Cancer Center, Jordan .The purpose of the study was to explain rapid changes on international standards. Sources including personal interviews, document review and on-site observations were combined to conduct a robust examination of KHCC's rapid changes. The changes which occurred at the KHCC during its formation and leading up to its Joint Commission International (JCI) accreditation can be understood within the conceptual frame of the transformational leadership model. Interviewees and other sources for the case study suggest the use of inspirational motivation, idealized influence, individualized consideration and intellectual stimulation, four factors in the transformational leadership model, had significant impact upon the attitudes and motivation of staff within KHCC. As a result it achieved improved levels of quality, expanded cancer care services and achieved Joint Commission International ccreditation under new leadership over a three-year period (2002–2005). A study was done on medication errors and patient safety in 2006.

The study focused on the word error has drawn attention to prevention and what can be done to minimize mistakes and improve patient safety. The study says the word error means an act that through ignorance, deficiency, or accident, departs from or fail to achieve what should be done. As a result, the researcher says all health care institutions to follow 5 RIGHTS of medication administration to avoid medication errors thus improve patient safety.

This study was done on medication safety in the Australian acute care setting. The study was done to examine the extent and causes of medication incidents and adverse drug events in acute care. A literature search was conducted to identify Australian studies, published from 2002 to 2008, on the extent and causes of medication incidents and adverse drug events in acute care. Results of incident reporting from hospitals show that incidents associated with medication remain the second most common type of incident after falls.

Omission or overdose of medication is the most frequent type of medication incident reported. Studies conducted on prescribing of renal excreted medications suggest that there are high rates of prescribing errors in patients requiring monitoring and medication dose adjustment. Research published since 2002 provides a much stronger Australian research base about the factors contributing to medication errors. Team, task, environmental, individual and patient factors have all been found to contribute to error. To conclude, medication-related hospital admissions remain a significant problem in the Australian healthcare system. Medication incidents remain the second most common type of incident reported in Australian hospitals.

A study conducted on reporting of incidents and near misses in NHS-London.. The purpose of the study was to find out the cases of under reporting of incidents and near misses as it is still a problem in NHS There were 974000 patient safety incidents and near misses in 2004-2005 reported, but as per National Patient Safety Agency, they failed to get accurate information on serious incidents and death .The investigating body found that doctors are less likely to report incidents than other group of health care providers. To top it all, the NHS simply has no idea how many people die each year from patient safety incidents. The report concludes that sufficient progress has been made to achieve the Department's plan to guarantee a safer NHS for patients.

Aim

The aim of the study is to review the measures adopted in the hospital to minimize the violation of IPSGs at MVR Cancer Centre and Research Institute, Kozhikode.

Objective

I. To review the incident reports and asses the measures adopted to minimize the IPSGs violation.

II. To improve the effectiveness of the IPSG Goals for improving patient safety and quality of care.

Methodology

The review was based on the incidents reported from the month of July 2020 – Dec 2020.

Study Design: A quantitative, descriptive, research design was used.

Study Location: The study was performed at MVR Cancer Centre and Research Institute, Kozhikode.

Study Duration: From July 2020 – December 2020.

Sample size: 6months data (Incident Reports)

Study Tool- Analysis done based on the incident reports related to the violation of IPSGs and the effectiveness of the Corrective and preventive actions taken to improve the patient safety and quality care.

Data Analysi and Interpretation

The data's were taken from the incidents reported in the month of July to December 2020.The incidents were selected based on non-compliance to IPSGs. A percentage analysis and graphical representation was done.

From the graph non-compliance to IPSG 1 in the month of July was 12% and in August 14.20%.It has been decreased to 5% in the month of December 2020. Non-compliance to IPSG 6 was 4 to 5% from the month of July to October and 0 incidents were reported in the month of December.

Non-compliance to IPSG 3 in September was 10% and 0 incidents were reported in the month of December.

Findings

Root cause analysis was done for all the incidents related to IPSGs and the corrective and preventive actions are suggested accordingly and evaluated by checking the process followed in the organization.

The corrective and preventive actions suggested were followed, thus it minimized the incidents related to IPSG violation.

Measures Taken

I.   Retraining and revaluation done regarding the IPSG. Daily monitoring was done to minimize such incidents.

II. Handovers from the nursing as well as in the doctor's side were properly followed by the clinical teams this has been evaluated by the quality department.

III. Chemo Templates and Chemo stickers were implemented in the hospital to reduce the IPSG 3 violation. That is used to monitor the medicine which is administered with the dose mentioned.

IV. Patient and family education forms in the bilingual language were implemented to create awareness about the risk of fall.

V.   WHO surgical safety checklist, Pre-OP checklist and policies on safe surgery were framed for the surgical department.

VI. Two (2) Identifiers 1. Name and 2.UHID No (unique hospital identification number) were used. Barcodes were generated before collecting the laboratory samples. Barcode contains the patient's details (Name, UHID, Department, Room No…etc.).Patient ID band or Wrist Bands were placed on the patient's wrist after getting admitted in the hospital.

Conclusion

Non-compliance to the IPSGs was decreased from the month of July-December 2020. As the measures adopted were followed and frequently evaluated. Accepting and adapting to the changes by the staffs were the success to reduce the incidents on IPSGs.

References

I.   Joint Commission International Accreditation Standards for Hospitals: available from www. jointcommissioninternational.org

II. Joint Commission International Center for Patient Safety: available from www.jcipatientsafety.org

III. Gibson T, School of Nursing and Midwifery, University of South Australia; Nurses and Medication error: a discursive reading of literature.

IV. The JCAHO patient safety event taxonomy: available from intqhc. oxfordjournals.org/content/17/.

Mr. Deepak Venkatesh Agarkhed

Associate Vice President Engineering Facilities & Quality Sakra World Hospital, Bangalore

Perioperative Hypothermia During Arthroscopic Shoulder Surgeries – A Quality Improvement Project

Introduction

Perioperative hypothermia is defined as core body temperature < 36°C. Patients undergoing surgery are prone to hypothermia due tocoldenvironment and anaesthesia induced impairment of thermoregulation. Perioperative hypothermia causes problems such as morbid cardiac events, coagulopathy, increased blood transfusion requirements, surgical wound infectionsand patient dissatisfaction. During arthroscopic shoulder surgery, a large amount of irrigation fluids is used to improvethe clarity of surgical field. But since these fluids are stored at room temperature, they exacerbate hypothermia. Hence, we conducted this project to quantify the incidence of hypothermia during arthroscopic shoulder surgeries and to reduce its occurrence.

Aims

This audit was conducted at our hospital with following objectives.

I.   To establish the incidence of hypothermia during arthroscopic shoulder surgery at our hospital.

II. To determine the compliance of the warming methods used to prevent hypothermia.

III. To correct any lacunae and improve the quality of patient care.

IV. To raise awareness among perioperative health care team on the importance of recognition, prevention and treatment of hypothermia.

Methodology

An initial prospective audit was performed on 25 patients undergoing arthroscopic shoulder surgeries which revealed a high incidence of hypothermia. After analysing the data, we implemented the use of blankets in pre-operative area, increased the ambient temperature in operation theatre (OT) to 21 from 19, educated nurses, ensured compliance in usage of warm intravenous fluids and forced air warmer. We re-audited 6 months later. While there was some improvement, still significant number of patients were already hypothermic at induction. We commenced prewarming patients in the preoperative waiting area. A third audit was done 6 months later to complete the cycle.

Results

Initial audit revealed the incidence of hypothermia at induction - 68%, hypothermia at extubation - 48%, ambient OT temperature -190 C, warm intravenous fluids usage -76% and usage of forced air warmer -100%. The second audit showed the incidence of hypothermia at induction – 44%, hypothermia at extubation -28% and 100% compliance in usage of warm intravenous fluids and forced air warmer. The third audit showed incidence of hypothermia at induction – 20%, hypothermia at extubation -8% and 100% compliance in usage of warm intravenous fluids and forced air warmer.

Study Parameters	First audit	Second audit	Third audit
Hypothermia at induction (%)	68	44	20
Hypothermia at extubation (%)	48	28	8
OT temperature maintained (°C)	19	21	21
Forced air warmer usage (%)	100	100	100
Warm iv fluids usage (%)	76	100	100

Incidence of hypothermia
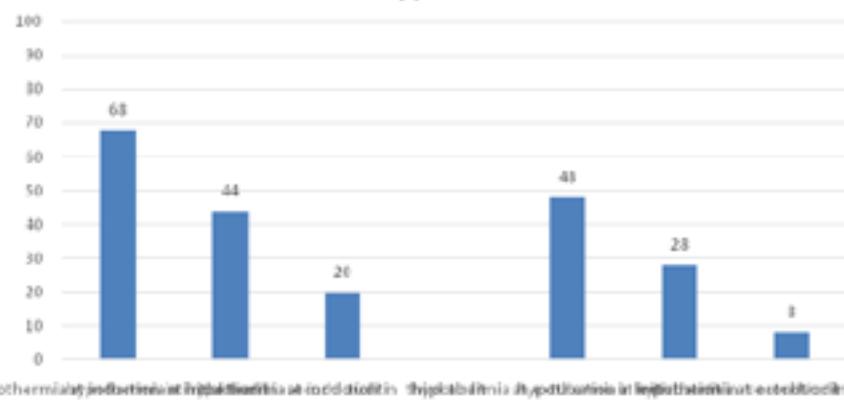
Discussion

While perioperative hypothermia continues to be a very common complication, it is neither innocuous nor inevitable. While maintaining normothermia is recommended by several international bodies, managing the patient's temperature during arthroscopic shoulder surgeries poses unique challenges. Extravasation of large volumes of irrigation fluid is common. Preventive methods include skin surface warming, warm and humidified circuit and administeringfluids using specific warming devices.

Surprisingly our initial audit found high incidence of hypothermia during arthroscopic shoulder surgeries.The areas identified for improvement were- OT temperature, proper use of forced air warmer, compliance in use of warm iv fluids. We worked on these aspects by involving the whole perioperative team. There was 35% reduction of hypothermia at induction and 42% reduction of hypothermia at extubation in second audit. Although National Institute for Health and Care Excellence clinical guideline recommends prewarming to prevent perioperative hypothermia, it is not routinely performed due to practical restrictions. 30 minutes of prewarming is needed to gain heat content exceeding the amount of redistribution. Therefore, raising peripheral temperature in advance might be meaningful in preventing core temperature

decrease due to body heat redistribution.

After prewarming the patients in preoperative area in addition to the above measures, there was 54% reduction of hypothermia at induction and 71% reduction of hypothermia at extubation in our third audit.

Presentation of the results, education of OT nurses, technicians, anaesthesiologists and surgeons resulted in increased awareness about perioperative hypothermia and its prevention leading to improvement in quality of patient care.

Conclusion

Our audit emphasises that simple multi-disciplinary interventions like the use of blankets in the pre-operative area, increasing the ambient temperature in OT, education of nurses, strict compliance with the use of warm intravenous fluids and continuous forced air warmer decreases the incidence of perioperative hypothermia during shoulder arthroscopic surgeries. However, we have noticed that prewarming the patients in addition to the above measures significantly decreases the incidence of perioperative hypothermia during shoulder arthroscopic surgeries and should become standard of care for such patients.

Keywords

Perioperative hypothermia, prevention, audit, shoulder arthroscopy

References

Sessler DI. Perioperative thermoregulation and heat balance. Lancet 2016;387:2655-64

Duff J, Di Staso R, Cobbe KA, et al. Preventing hypothermia in elective arthroscopic shoulder surgery patients : a protocol for a randomized controlled trial. BMC Surg 2012;12:14

NICE and warm. British Journal of Anaesthesia 2008;101:293-295

Scott E, Buckland R. A systematic review of intraoperative warming to prevent postoperative complications. AORN 2006; 83:1090-1113

Steelman VM, Chae S, Duff J, Anderson MJ, Zaidi A. Warming of irrigation fluids for prevention of perioperative hypothermia during arthroscopy: a systemic review and metanalysis. Arthroscopy 2018;34:930-942

Yoo HS, Park SW, Yi JW, Kwon MI, Rhee YG.The effect of forced-air warming during arthroscopic shoulder surgery with general anesthesia. Arthroscopy 2009; 25: 510-514

Dr Rohin Saini

Assistant Quality Manager, Max Smart Super Speciality Hospital, Saket, New Delhi

Impact of Application of International Patient Safety Goals on Patient Safety Culture

Health care delivery systems have become more efficient and also become more complex, with greater application of new technologies and therapies, which requires adopting the international patient safety goals to improve the patient safety environment to simulate better patient care rendered by the hospital staff to improve patient outcomes while minimizing possible adverse events The simplest definition of patient safety by World Health Organization (WHO) is the prevention of mistakes and side effects to patients associated with health care.

Promoting a culture of safety has become one of the columns of patient safety. As healthcare facilities make every effort to improve their quality of care and provide their service in an adequate standard, focusing on patient safety has become a priority.

Problem Statement

To study the relation between the application of international patient safety goals and patient safety culture in the hospital.

Objective

I. Detecting the impact of application of international safety goals on patient safety culture.

II. Describing the level of application of international safety goals

III. Detecting the outcome of implementation of International Patient Safety Goals

Study Importance

This study gives a general review about variables (international Safety goals and patient safety culture) and their correlations. In addition, this study provides effect of implementation of International patient safety goals on patient outcomes.

Frame Work

STRUCTURE

PROCESS

OUTCOME

IMPROVED PATIENT SAFETY CULTURE

A) Structure

Policy Development

Policies related to IPSGs were formulated such as Patient Identification, Effective communication, High Alert medications, Handover communication, ensure correct site, procedure and patient, policy on prevention of fall and policy for care of vulnerable patients and disseminated to all the relevant stakeholders

	Max Quality Policy	Reporting of Critical Tests Results	
MAX HEALTHCARE Care for life	Version:	Effective Date : 01 July 2019	Page: Page 1 of 2
	Reference	NABH- AAC 6.f; AAC 9.g	JCI- IPSG 2.1

Reporting of Critical Tests Results

Purpose
- To outline a standard procedure and process on reporting of critical results of diagnostic tests.

Scope
- Laboratory
- Radiology
- Non-Invasive Cardiac Lab

Definition/Abbreviations

Critical Test Result:
- A critical test result is a test result that is significantly outside of normal limits, and also has the potential of causing significant medical implications on the patient's condition thus requiring immediate attention and action by the patient's medical provider.
- The critical test result value represents a pathophysiological state at such variance with normal (expected values) as to be life-threatening unless something is done promptly and for which certain

	Max Quality Policy	Handover Communication	
MAX HEALTHCARE Care for life	Version:	Effective Date: 01 May 2019	Page: Page 1 of 3
	Reference	NABH- AAC 6.f; AAC 9.g	JCI- IPSG 2.1

Handover Communication

Purpose
- To define a safe process to convey critical information about a patient's care when transferring care responsibilities from one physician to another, one nurse to another from one level of care to another level of care, from in patient units to diagnostic or other treatment departments.

Scope
- Hospital wide

Definition/Abbreviation

Handover Communication: The primary objective of a "handover" is to provide complete and accurate information about a patient's clinical status, including current condition and recent and anticipated treatment. The information communicated during a handover must be complete and accurate to assure safe and effective continuity of care.

Mentors

Area-wise champions or Mentors were identified and trained so that they can train other staff down the line. Mentors were selected from Floor Coordinators, Nursing supervisor/ Team Lead or In-charge

Audit Checklist

Various audit checklists, specific to an area for different cadre of staff like General Observation, doctors, Nurses and paramedics was developed and used while performing the assessment

- BMW Central Collection Area of the Hospital - Cycle 4 Checklist
- Code RRT - Cycle 4 Checklist
- CTVS ICU - Cycle 4 Checklist
- Emergency - Cycle 4 Checklist
- Immunization record - Cycle 4 Checklist
- Labour Room - Cycle 4 Checklist
- MICU - Cycle 4 Checklist
- MRD - Cycle 4 Checklist
- Needle Stick Injury - Cycle 4 Checklist
- NICU - Cycle 4 Checklist
- Onco Day Care - Cycle 4 Checklist
- OT - Cycle 4 Checklist
- PICU - Cycle 4 Checklist
- Radiology - Cycle 4 Checklist
- SICU - Cycle 4 Checklist
- Wards - Cycle 4 Checklist

IPSG & other processes	General Observation	Policy & Process	Score	Remarks
IPSG 1	Check ALL IN PATIENTS (in the area being audited) are wearing a white ID (Identification) Band Including CONFUSED/ UNCONSCIOUS/ COMATOSED patients	Patient Identification		
IPSG 1	Check Contents of White ID band - Max UHID No. - IP/ ER No. - Patients First & Last Name - Age/ Sex	Patient Identification		In case the full name has not been mentioned, registration form to be checked
IPSG 1	- Check for Red Band - To be worn by patients with known allergies - Allergy Name to be written in CAPITAL LETTERS in the Red ID band. -Red and white band to be on the same wrist of the patient	Patient Identification		
IPSG 1	Check correct patient identification: - before proceeding with blood transfusion - during High alert medication administration - being done while serving special diet to the patient - During imaging - USG, X Ray	Patient Identification		To put explaination of your score All the different aspect as per GO may be required to be audited as per the respective areas
IPSG 1	Check for correct sample labelling in ICU (Blood, urine samples, Pleural tap, Ascitic Tap, etc). Also cross ckeck the patient details in registers. - check during live sample collection - check the patient details on samples in sample box	Patient Identification		

IEC Material

Posters and education material in form of
Handbooks were distributed to the staff so
ready reference and ease of availability

INTERNATIONAL PATIENT SAFETY GOALS (IPSG): 2019-20

Let us ensure 100% Compliance to Safe Processes and Target 'Zero Incidents'

IPSG 1

Identify Patients Correctly:
- Patients are identified using "two" patient identifiers
- Patients are identified before:
  - Performing diagnostic procedures
  - Providing treatments and other procedures.
- Patient identification of comatosed patients and newborns

IPSG 2

Improve Effective Communication:
- Verbal/ Telephonic Orders: Read Back, Confirm and Record
- Critical Results of diagnostic tests – Define critical values, Report & Document
- Handover Communication for both "doctors & nurses" during shift handovers and patient transfers

IPSG 3

Improve the Safety of High-Alert Medications:
- High Alert Medications
- Look Alike Sound Alike medications
- Concentrated electrolytes – Identification, labeling, storage and proper use (Prevent inadvertent administration)

IPSG 4

Ensure Correct–Site, Correct–Procedure, Correct–Patient Surgery:
- Site Marking to be done by the person performing the procedure (with involvement of Patient)
- Time Out (OT & invasive Procedures) by full surgical team
- WHO Surgical Safety Check list
- Use of "Procedure Safety Checklist" for medical & dental procedures (performed outside OT)

IPSG 5

Reduce the Risk of Health Care Associated Infections
- Compliance to hand hygiene guidelines
- Evidence-based practices to prevent HAI's
- Follow VAP, Central Line & Catheter Care Bundles.
- Compliance to Antibiotic Policy

IPSG 6

Reduce the Risk of Patient Harm Resulting from Falls
- Fall Risk Assessment (All Inpatient, Outpatient, Adult & Pediatric)
- Screening outpatients for falls
- Initial, ongoing & reassessments of patients identified at risk of falls
- Implementation & monitoring of fall risk reduction measures

Your Safety First

CATHETER CARE AT HOME – FOR FEMALE

B) Process

Training

Regular training sessions for Mentors and
On job training sessions taken by mentors
to strengthen and inculcate the policies into
work processes and routine.

TRAINING SESSIONS FOR MENTOR/ STAFF

Staff Engagement

Celebration of Patient Safety Week, program spread over
7 days involving interactive Quiz sessions, play and skit by
staff, poster making competition.

PATIENT SAFETY WEEK CELEBRATION
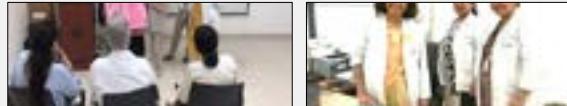
Audit & Analysis

Audit by Central Quality Team, based on International Patient Safety Goals using checklist developed in-house are conducted in every quarter. Results are shared with Management for preparation of action taken report and gap closures

C) Outcome

Through regular training and compliance monitoring by the audits, staff has become more aware of the policies and procedure related to IPSGs thus resulting in better patient outcome such as gradual reduction in Hospital Acquired Infections.

IPSG % Compliance- MAX SMART

Policy wise % Compliance- MAX SMART

CLABSI Rate

2020-21	Apr-Jun	Jul-Sep	Oct	Nov	Dec	YTD
Central Line days	600	716	264	300	253	2133
CLABSI cases	0	2	0	1	1	4

CAUTI Rate

2020-21	Apr-Jun	Jul-Sep	Oct	Nov	Dec	YTD
Catheter days	1688	1309	372	480	403	4252
CAUTI cases	0	0	0	1	0	1

YTD Aggregate HAIs Rate =0.27

VAP Rate

2020-21	Apr-Jun	Jul-Sep	Oct	Nov	Dec	YTD
Ventilator days	351	558	167	226	185	1487
VAP cases	0	2	0	0	0	2

SSI Rate

2020-21	Apr-Jun	Jul-Sep	Oct	Nov	Dec	YTD
Total surgeries	164	2	0	0	0	166
SSI cases	0	0	0	0	0	0

Conclusion

The result shows that there is an agreement among participants on high application of each international patient safety goals variable (Patient Identification & communication, Safety of medications & surgery and Infections & fall hazards reduction), which indicates that there is an agreement on high presence of these variables in the hospital. The overall result indicates that there is a significant application of the international patient safety goals in the hospital. This indicates that the medical staff recognize the importance of the application of the International Patient Safety Goals variables.

The results also show that the relationships between International Patient Safety Goals variables are strong relationships. Furthermore, the relationship between total International Patient Safety Goals and Patient Safety Culture is very strong, Thus implementation of International Patient Safety Goals fuels the Patient Safety Culture with improved patient outcomes.

Poster Contest Winners

First Prize

Dr. Paresh Shah

Dhirubhai Ambani Occupational Health and
Family Welfare Cenre, Jamnagar, Gujarat, India
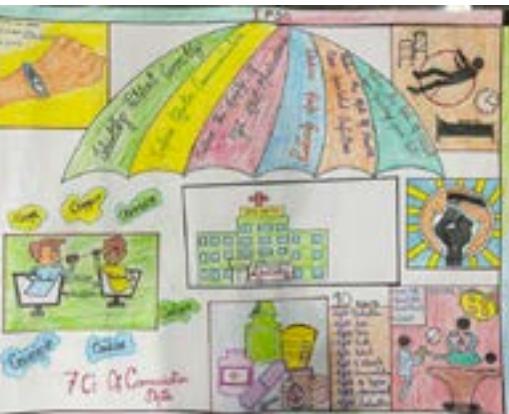
Second Prize

## Dr. Shine Anil

Narayana Health
SRCC Children's Hospital

SRCC CHILDREN'S HOSPITAL
Managed by Narayana Health

International Patient Safety Goal: The Best Practices

Identify Patients Correctly

IPSG : 1

Streamline ID band policy

Structure: Snippet on SOP circulated in WhatsApp

Process: Awareness in the form of poster in respective department

Outcome: Audit

IPSG 1 audit compliance: Department-wise

Improve Effective Communication

Structure: Snippets on SOP circulated in WhatsApp

Critical Result Stamp

ISBAR Handover Tool

Process: Awareness Simulation Video and Posters

Outcome: Audit

IPSG : 2

Improve Safety of High Alert Medication

IPSG : 3

Structure : Snippets on SOP circulated in WhatsApp

Process: Awareness in the form of poster in respective department

Outcome: Audit

Narcotic Medication Audit

Ensure Correct-Site, Correct-Procedure, Correct- Patient Surgery

Structure : Snippet on SOP circulated in WhatsApp

Process:
1. WHO Time out checklist in OT and Cath lab
2. Surgical Site Infection Tracking

Post discharge call on 7th,30th and 90th day

Identified dedicated staff for post discharge calls

Outcome: Audit

Time-Out Audit

IPSG : 4

Reduce the Risk of Health Care Associated Infection

IPSG : 5

Structure : Snippet on SOP circulated in WhatsApp

Process:
Infection Control Link Nurses 24 hrs : 10 RN

Alert for HCW contact isolation patients

Blue curtain ,Red file,PPE

Outcome: Audit

Implement 3in 1 Bundle checklist

Reduce the Risk of Patient Harm Resulting From Fall

Structure : Snippet on SOP circulated in WhatsApp

Process: 1. Awareness in the form of poster in respective department 2. Part of PFE form 3. Bilingual teaching materials

Outcome: Audit

IPSG : 6

Third Prize

Daisy Rani
Wockhardt Hospital

Consolation Prize

Ankita Pawar

Activities by Hospitals on Patient Safety Day

By Sterling Hospital Ahmedabad on Patient Safety Day

By Mehta Multispecialty Hospitals India Pvt. Ltd. Chennai, India

Patient Safety Day

**" Lighting Up Orange "**

By District Hospital, Ujjain

By CARE Hospitals, Musheerabad, Hyderabad

At CARE hospitals Musheerbad , the unit had organized a Patient safety talk which was given by Dr.Archana, HOD of Laboratory medicine at CARE Hospitals,Musheerabad. The unit also conducted poster competition in which many Nursing and Admin staff participated.

Patient safety Talk :
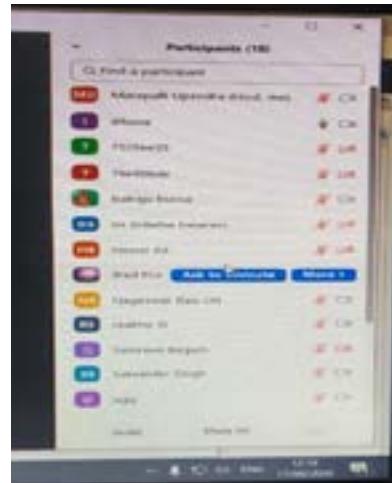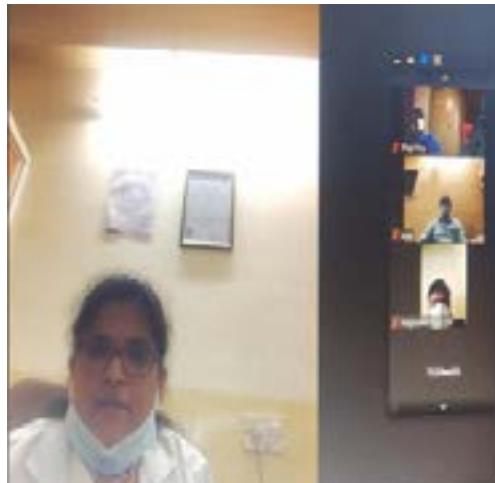
Poster competition :

Ganga CARE Hospitals, Nagpur
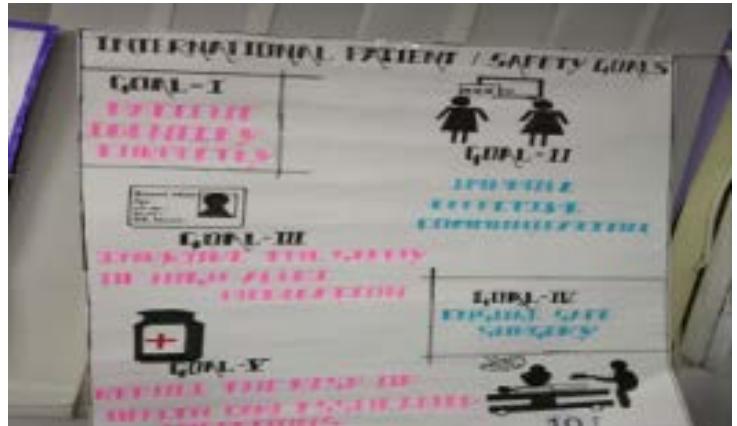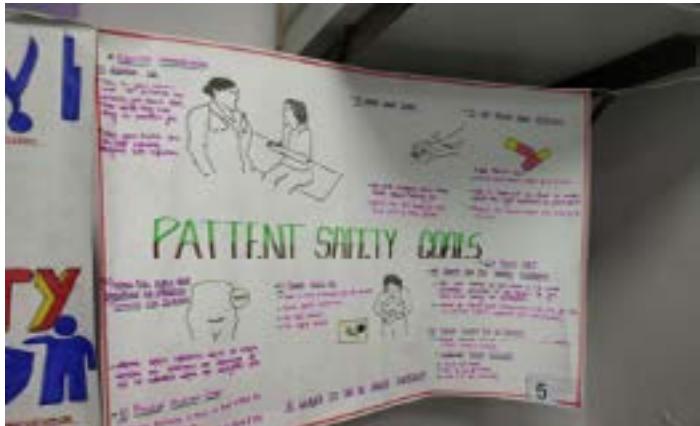
Ramakrishna Care Hospital, Raipur: Fire Training

NABH DARSHAN

A robust Health Management Information System for District Hospitals in India

Dr. Kashipa Harit

Deputy Director,
NABH

Arsh Hashmi

Project Associate,
PPID

District Hospitals are an essential component of public healthcare system in India providing access to specialised healthcare. In spite of their critical role in public health, there was no system to evaluate district hospitals on measurable health outcomes and to assess their data management practices.

In this regard, NITI Aayog, as mandated by the Government of India, created a framework based on 16 Key Performance Indicators (KPIs) to assess performance outcomes in district hospitals. The KPIs included number of functional beds, ratio of doctors, number of laboratory tests per technicians, C-section rate among others. The KPIs were based on more than 120 data items of Health Management Information System (HMIS) which is an online portal where district hospitals submit data on health indicators.

NABH-QCI was on boarded by NITI Aayog to conduct an independent onsite review and validation of data items of the KPIs which are submitted by 731 District Hospitals of the country on HMIS. This was a significant exercise given it was the first time any large scale national survey was to be done at the District Hospital level covering all districts across the country.

NABH formulated an assessment framework to validate the KPIs through onsite assessments

after extensive consultations with NITI Aayog, Ministry of Health and Family Welfare, Indian Statistical Institute and multiple field tests. A survey instrument based on a mobile application was also designed to conduct the onsite assessments and data collection.

More than 400 assessors including NABH assessors and medical professionals from notable institutes of the country were engaged for the assessments. The assessors were trained in training programs conducted by NABH in 17 cities across the country.

The assessments of the 731 district hospitals were executed simultaneously at a pan India level. The assessors were mapped to the district hospitals and a backend NABH team was assigned to the assessors for necessary assistance and conducting quality checks of the data collected. The planning and execution of the assessments involved multiple challenges given many district hospitals to be assessed were situated in sensitive areas of Nagaland, Jammu & Kashmir, Chhattisgarh and in difficult terrains of Arunachal Pradesh and Meghalaya, etc.

NABH successfully completed the assessments of 700+ hospitals across the country in a span of three months. The entire exercise was implemented with the NABH team working on multiple tasks like training and mapping the

assessors, operationalizing the assessments, coordinating with the state and district level authorities, conducting rigorous quality checks of the data collected, presenting the findings with the States and NITI Aayog, drafting the report among others. The efforts of the team were greatly commended by Mr. Alok Kumar, Advisor, Health, NITI Aayog when he gave a standing ovation to the team on successful completion of the assessments.

NABH recommended actionable policy reforms based on the insights gathered in the assessments to NITI Aayog, Ministry of Health and Family Welfare and State Governments to improve data reporting and management at the District Hospitals. This included proposing revisions in IPHS standards, standardisation of data definition, trainings on HMIS operations among others.

The exercise undertaken by NABH is significant as it has revealed comprehensive insights into HMIS and created immense awareness among the concerned stakeholders about the importance of HMIS data in developing informed policies for public healthcare. It will also facilitate NITI Aayog's framework for District Hospital ranking and create a collaborative and competitive environment towards quality improvement in public healthcare.

**Farewell of
Dr. Gayatri Vyas Mahindroo**
Senior Director NABH

Celebrations @NABH

**Women's Day
Celebration**

**Doctor's Day
Celebration**

Independence Day Celebration
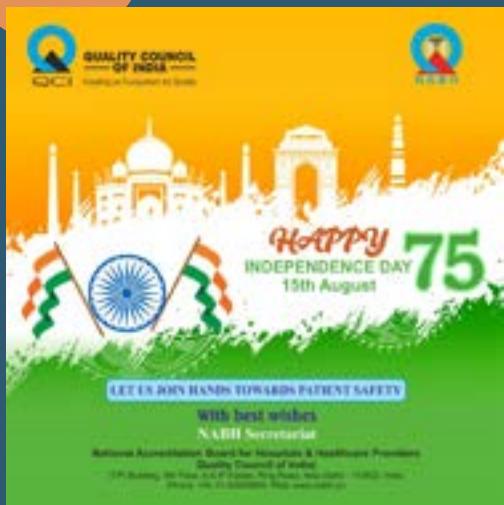
Onam Celebration

Birthday Celebration

World Patient Safety Day

Every year 17th September is traditionally celebrated as "World Patient Safety Day." The theme decided by the World Health Organization for last year, in view of the ongoing pandemic, was "Health Worker Safety: A Priority for Patient Safety." The overall objectives were to enhance understanding of patient safety, increase public engagement in the safety of healthcare workers and promote practices to enhance patient safety and reduce patient harm. The origin of the Day is firmly rooted in the fundamental principle of medicine – First, do no harm.

The COVID-19 pandemic is presently among the biggest challenges and threats facing the world and humanity, and healthcare is passing through its greatest crisis in patient safety ever! The pandemic has exerted unprecedented pressure on health systems worldwide. Since health systems can only function with health workers, a knowledgeable, skilled, and motivated health workforce is critical for the provision of safe care to patients.

The COVID-19 pandemic has highlighted the huge challenges health workers are currently facing globally. Working in stressful environments exacerbates safety risks for health workers, including being infected and contributing to outbreaks in the healthcare facility, having limited access to personal protective equipment and compliance with other infection prevention and control measures, and the consequence being potential harm to patients and healthcare workers. In many countries, health workers are exposed to increased risks of infections, violence, accidents, stigma, illness and death.

NABH staff decided to take a pledge virtually to undertake all activities for promotion of Patient Safety in the health facility, community, and country. The pledge read as the following:

"I commit to dedicate myself to make health care safer by supporting, but not limited to, following actions, namely:

I. Identification and implementation of the ways to reduce errors in patient care

II. Improving our skills and knowledge on all related subjects pertaining to patient safety

III. Actively engaging patients and families as partners in their care

IV. Raising public awareness about patient safety

V. Nurturing, supporting and promoting transparency in care through team work

VI. Learning from errors for safeguarding interest of patients, and

VII. Supporting my professional colleagues in their endeavour of promotion of cause of patient safety. "

NABH also encouraged Healthcare organizations already registered/accredited/certified with NABH, and having implemented (or may be in the process of implementation) the NABH standards which focus on the quality healthcare that leads to the patient safety & employee safety, to observe the World Patient Safety Day on 17th September 2020 as "Health Worker Safety: A Priority for Patient Safety" & organize motivational activities. The healthcare organizations were invited to conduct various activities in their respective organizations. For example

- Recognition of exemplary work done by employees

- Special on-the-job-trainings for staff members in the field of patient safety

- Poster competition

- Recognition of Patient Safety Champions in the organization

- Skits or dance competitions on better patient / employee safety as the subject

- Panel discussions with patient safety experts, healthcare providers, patients, representatives of health insurances, or government agencies

- Information events on special topics such as hygiene or safe medication in clinics, hospitals, pharmacies, or nursing homes

- Press releases and media interviews

The healthcare organizations were asked to share the photographs and details of the activities conducted on the occasion of World Patient Safety Day so that the same could be included in the next issue of NABH Newsletter- Quality Connect. Hospitals were asked to share the stories of extraordinary courage or grit on the part of the patients and /or the staff along with the photographs. NABH got a very overwhelming response from the healthcare organizations which is published in this issue of the Newsletter.

Virtual Pledge for Patient Safety

QUALITY | SAFETY | WELLNESS

**Darkness unto Light:
Let's light a candle for Patient Safety**

Pledge 2021

Quiz Contest Winners
NABH Newsletter Issue -2

Mohd. Imran Khan
Quality Manager
CMCH, Bhopal

Mr. Suresh V
Enterprise Executive Quality
NU Hospitals Pvt. Ltd
Bengalur

QUALITY | SAFETY | WELLNESS

CONTEST ALERT

NABH celebrates

"International Patient Safety Day"

17 September 2021

Inviting participation from our partners

1. **Slogan competition**

   Topic: 'Safe maternal and new born care'
   Rules: English language, maximum 20 words

2. **Poster competition**
   Topic: 'Creating a patient safety culture'

   Rules: Hand made or Digital poster (Any paper, Any size,   Any digital platform, Any colour, Art or collage)

3. **Video and Photograph s of the Staff**
   Theme: Darkness unto Light: Let's Light A Candle for Patient Safety
   Rules : In portrait mode with the organisation logo in the background

   Exciting prizes to be won

Submit your entries in jpg, pdf format by 31 Dec 2021
on nabh@nabh.co with subject line International Patient Safety Day

QCI - D.L. SHAH QUALITY AWARD

QUALITY COUNCIL OF INDIA
Creating an Ecosystem for Quality

D. L. SHAH TRUST
FOR APPLIED SCIENCE, TECHNOLOGY
ARTS & PHILOSOPHY

NBQP

QUALITY COUNCIL OF INDIA ANNOUNCES
14TH CYCLE OF QCI - D.L. SHAH QUALITY AWARD (PROJECT BASED)

We are pleased to announce and invite applications for the 14th edition of the prestigious QCI – D.L. Shah Quality Award 2021.

It is one of the most coveted Awards at the National level. Started in 2007, every year these Awards are given to the outstanding projects of establishments within India who have ensured continuous improvement on three aspects, namely: -

- Operations and processes
- Products and/or services
- Customers'/stakeholders' satisfaction

WHY QCI – D.L. SHAH QUALITY AWARD

- Provides a special recognition to the organization and its projects
- Provides motivation and stimulates continual improvement within the organization
- Builds the customers' and stakeholders' confidence in the organization

There are 3 levels of the Award : - **PLATINUM, GOLD, SILVER**

ELIGIBILITY CRITERIA

The Award is open to any kind of establishment within India like:

- Any Govt. Enterprise
- Manufacturing
- Infrastructure
- Food
- PSU
- Healthcare
- Education
- Petroleum, Oil and Gas
- NGO
- IT/ITes
- Service
- MSME
- Finance
- Pharma
- Others

Sectors covered by GoI under Udyog Manthan are encouraged to apply

Last date for submission of applications : 31st December, 2021

AWARD PROCESS

Online Application by the Organization -> Document Assessment -> Project Presentation -> Site Verification -> Final Selection by the Jury.

3 projects per unit/plant location can apply

AWARD DISTRIBUTION

The winners will be selected by the Jury from QCI and D.L. Shah Trust and recognized during the Quality Conclave.

FOR ANY OTHER QUERIES, PLEASE CONTACT :

Shruti Gupta - shruti.nbqp@qcin.org

Mob : 8800891834, +91-11-2332 3415, Ext : 306

Priyanka Maithani - priyanka.nbqp@qcin.org,

Mob : 8178602471, +91-11-2332 3415, Ext : 305

HOW TO APPLY :-

The application needs to be submitted online.

Please visit
https://www.qcin.org/nbqp/dsa/Home/home.aspx
for registration and further details.

Quality Council of India invites application for the

3rd

QCI-QUALITY CHAMPION AWARD-2021

QUALITY COUNCIL OF INDIA
QCI
Creating an Ecosystem for Quality

NBQP

Quality Champion Award aims to honor outstanding individuals {Indian nationals including NRI (holding indian passport) and OCI card holders} who have demonstrated/ contributed significantly towards the Quantum improvement in Quality.
This may include the following but not limited to:

1. Technological Innovations

2. Significant improvement in the quality of processes, product and services.

3. Out-of-the-box initiatives taken to become best in the class, that may be benchmarked

All quality professionals who have facilitated a quality journey and have achieved some or all of the aspects below are encouraged to apply:

a) Benefited self, organization and society

b) Obtained patents

c) Received recognitions-Awards/rewards and stakeholder's appreciation within and outside the organization

d) Released quality related publications and articles in prestigious journals

e) sustained the growth of organization as evident from the business results

Levels of Award:

| PLATINUM | DIAMOND | GOLD |

For any other queries please contact:

Ashutosh Kumar
Analyst,
ashutosh.kumar@qcin.org | 9625132098

Priyanka Maithani
Assistant Director,
priyanka.nbqp@qcin.org
+91 - 11-2332 3415 Ext . 305

For further detail please visit our website: https://www.qcin.org/nbqp/dsa/home/Home.aspx

NO APPLICATION FEES

NATIONAL ACCREDITATION BOARD FOR HOSPITALS AND HEALTHCARE PROVIDERS (NABH)

NABH

ISQua Accreditation ORGANISATION

ISQua Institutional Member 2020-2021

5th EDITION
JANUARY 2020

GUIDEBOOK TO NABH ACCREDITATION STANDARDS FOR HOSPITALS