SURGICAL SAFETY CHECKLIST

An Effective Risk Management Tool in OR

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"Hospitals do MOST things right on MOST patients, MOST of the times
The Checklist helps them do
ALL the things right, on ALL patients, ALL the time"

Aim - In complex setting of an operating room (OR), any of the steps may be overlooked during the preoperative, intraoperative, or postoperative preparations. Based on Safe Surgery Saves Lives programme launched by WHO, a customized checklist was introduced in Fortis Hospital, Noida to ensure the correct patient, correct site, correct procedure and correct surgery (IPSG-4) and to reduce the risk of Anaesthesia & surgical complications . The aim of the checklist is to reduce the number of errors during surgery and to reduce post-operative complications & to give teams a simple, efficient set of priority checks for improving effective teamwork and communication and to encourage active consideration of the safety of patients in every operation performed.

Objectives - WHO has identified 10 essential objectives for Safe Surgery, which can all be achieved by use of the Checklist. (1) Operate on the correct patient at the correct site. (2) Use methods known to prevent harm from administration of anaesthetics, while protecting the patient from pain. (3) Recognize and effectively prepare for life-threatening loss of airway or respiratory function. (4) Recognize and effectively prepare for risk of high blood loss. (5) Avoid inducing an allergic or adverse drug reaction for which the patient is known to be at significant risk. (6) Consistently use methods known to minimize the risk for surgical site infection. (7) Prevent inadvertent retention of instruments or sponges in surgical wounds. (8) Secure and accurately identify all surgical specimens. (9) Effectively communicate and exchange critical information for the safe conduct of the operation. (10) Hospitals and public health systems will establish routine surveillance of surgical capacity, volume and results.

Methodology - As a Pilot, a customized checklist was implemented after sensitization and training of all OR users in Fortis Hospital, Noida (one of 66 Hospitals of Fortis Healthcare, India). A Steering committee compromising of surgeons, anaesthetists, technician, nurses, administration and quality department was formed which later transformed into Implementation Team. Implementation Team was divided into 3 broad categories: modification of current checklist, Awareness and training, retrospective & prospective data collection. It was decided that Safe Surgery Checklist to be considered as a Continuous Quality Improvement tool outside the medical record. Trainings of nurses, technicians, surgeons and anesthesiologists were conducted.
The checklist identifies three phases of an operation in normal flow of work, before an
aesthesia induction (Sign In), before skin incision (Time Out) and before patient leaves the OR (Sign Out). In each phase, the circulating nurse confirms the completion of the checklist. All steps are to be checked verbally with the appropriate team members to ensure that the key actions have been performed. Therefore, before induction of anaesthesia, the person coordinating the Checklist verbally review with the anaesthetist and patient (when possible) that patient identity has been confirmed, that the procedure and site are correct and that consent for surgery has been given. Before skin incision, each team member introduces him or herself by name and role. The team confirms out loud that they are performing the correct operation on the correct patient and the correct site and then verbally review with one another, in turn, the critical elements of their plans for the operation, using the Checklist for guidance. They also confirm that prophylactic antibiotics have been administered within the previous 60 minutes and that essential imaging is displayed, as appropriate. Before leaving the operating room, the team reviews the operation that was performed, completion of sponge and instrument counts and the labeling of any surgical specimens obtained. It also reviews any equipment malfunctions or issues that need to be addressed. Finally, the team discusses key plans and concerns regarding postoperative management and recovery before moving the patient from the operating room.
As operating teams become familiar with the steps of the Checklist, they integrate the checks into their familiar work patterns and verbalize their completion of each step with maximum efficiency and minimum disruption, without the explicit intervention of the Checklist coordinator.
After reviewing and analyzing twelve month data, the checklist & SOP was modified, simplified & strengthened, and then implemented in ten A-Category hospitals of Fortis, with Head Anaesthesia being made responsible for 100% implementation. It's now being monitored every month in all A-10 Hospitals.

Result - (A) Few Errors which have been prevented through usage of the Checklist
Draping of Wrong Side
Missing Radial Pack
Blood not arranged
Drug Allergy missed
(B) Impact on Financials, Patients and Employees

Impact on Financials:	**Impact on Patients:**	**IMPACT ON EMPLOYEES:**
1. Less SSI (Surgical Site Infection) 2.Decreased ALOS (Average Length of Stay) 3.Decreased rate of return to OR. 4. Elimination of error mitigates chances of litigation and compensation.	1. **Financial savings** due to decreased ALOS on account of decrease complications, decreased SSI, decreased duration of surgery. 2. **Better outcome** on account of Better planning, safer anesthesia and Timely administration of correct medication and elimination of errors. 3. **Patient safety**	1. Team work & Better communication 2. Smoother and quicker processes 3. Decreased turnaround time 4. Skill enhancement 5. Improved staff morale 6. Secure working environment.

Discussion - The Checklist reinforces accepted safety practices and fosters better communication and teamwork between clinical disciplines. The Checklist is intended as a tool for use by clinicians interested in improving the safety of their operations and reducing unnecessary surgical deaths and complications.
Advantages of using a checklist are : (1) It is Customizable to local setting and needs (2) Deployable in an incremental fashion (3) Supported by scientific evidence and expert consensus
(4) Evaluated in diverse settings around the world (5) Ensures adherence to established safety practices (6) Minimal resources required to implement a far-reaching safety intervention.
The surgical safety checklist helps to insure that teams consistently follow critical safety steps and thereby minimize the most common and avoidable risk that endanger lives and safety of surgical patients. It evaluates the current state of safety practices and standards at our facility and identifies area for improvement.
Use of the Surgical Safety Checklist has demonstrably improved compliance with basic standards of surgical care

Conclusion - Safe Surgery Checklist pilot undertaken in one hospital, was established, strengthened & then replicated as best practice to number of hospitals of Fortis, by quick revision & re-implementation in a consolidated timeframe.
It proved to be an efficient way to bring change management to eliminate the risk to the Patients, employees & the Organization.

Leave aside the other advantages, if 2 minutes taken out to read aloud one sheet of paper could prevent wrong surgeries (both wrong patients and wrong site), it would be more than worth its weight in Gold, as **The Moral, Legal and Financial cost of wrong surgery is Unquantifiable.**