

For Patients Undergoing an Invasive Procedure, Will Instituting a Post Procedure Sign out/Debrief Result in a Reduction of Errors?

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Background

- Specimen containment, requisition, or labeling errors occur in about 6% of operations nationally
- 13 intraoperative errors occurred at NLEMMC in 2019
- Wrong site surgery occurs in 1 out of 112,000 surgeries
 - 5% of these are performed on the wrong patient
 - 60% are wrong site laterality

Debrief Procedure:

- Before an invasive procedure**, a surgeon-led briefing is performed. A brief surgical plan is discussed, along with anticipated risks, equipment concerns, specimens, patient positioning, and an introduction of team members
- At the end of a procedure**, a similar discussion is to be had. The surgeon-led debrief will include estimated blood loss, surgical complications, and confirmation of surgical specimens.

Practice Change

Increase operating room (OR) and emergency department (ED) staff knowledge of integrating AORN recommended time outs and debriefs in daily clinical practice

Methods

- Observational pre-audit and assessment completed in OR and ED
- Presented educational posters inside each OR for staff to review individually
- Post-survey and assessment completed with documented errors during invasive procedures (pre and post implementation)

Measures and Results

Audit Forms

Universal Protocol EMMC Advanced Surgical Care Time-Out Audit				
Auditor:	Case 1 MR #	Case 2 MR #		
Date:	Yes	No or N/A	Yes	No or N/A
Before Skin Incision				
PAUSE: All other activities to be suspended (except in case of life-threatening emergency)				
Time-Out lead by Provider				
Introduction of team members				
Confirmation of Patient Identity – two identifiers				
Confirmation of Surgical Consent – dated, timed, signed by surgeon and patient				
Provider confirms procedure, incision site and laterality				
Incision Site is marked and visible				
Surgeon: states case duration, anticipated blood loss				
Anesthesia provider: confirmation of Patient Allergies				
Anesthesia provider: antibiotic prophylaxis within 1 hour before incision				
Fire Risk Assessment – prevention methods implemented				
Smoke Evacuator- Is a smoke evacuator device being used?				
RN Circulator and Scrub Person – sterilization indicators confirmed				
Med Labeling – medications and solutions on the field are labeled with name and strength				
SSI Prevention – skin prep agent dry before drapes applied (3 minute dry time)				
Comments:				

EMMC Advanced Surgical Care Debrief audit				
Auditor:	Case 1 MR #	Case 2 MR #		
Date:	Yes	No or N/A	Yes	No or N/A
Actual procedure done				
EBL				
Emergency/Recovery Concerns				
Foley/Drains/Packing				
Equipment				
Position restrictions				
Specimens				
Case Review: CST, Circulator, Anesthesia, Surgeon, Others(as needed)				
Next Case: ABX, Position, Table, Anesthesia, Equipment				
Expected Return Time:				
Comments:				

Educational Pamphlet

COMPREHENSIVE SURGICAL CHECKLIST			
PREPROCEDURE	SIGN-IN	TIME-OUT	SIGN-OUT
CHECK-IN	Before Induction of Anesthesia	Before Skin Incision	Before the Patient Leaves the Operating Room
In Holding Area	Before Induction of Anesthesia	Before Skin Incision	Before the Patient Leaves the Operating Room
Patient/patient representative actively confirms with Registered Nurse (RN):	RN and anesthesia care provider confirm:	Initiated by designated team member	RN confirms:
Identity <input type="checkbox"/> Yes Procedure and procedure site <input type="checkbox"/> Yes Consent(s) <input type="checkbox"/> Yes Site marked <input type="checkbox"/> Yes <input type="checkbox"/> N/A by person performing the procedure	Confirmation of: identity, procedure, procedure site and consent(s) <input type="checkbox"/> Yes <input type="checkbox"/> N/A by person performing the procedure Patient allergies <input type="checkbox"/> Yes <input type="checkbox"/> N/A	All other activities to be suspended (unless a life-threatening emergency) Introduction of team members <input type="checkbox"/> Yes All: Confirmation of the following: identity, procedure, incision site, consent(s) <input type="checkbox"/> Yes <input type="checkbox"/> N/A Site is marked and visible <input type="checkbox"/> Yes <input type="checkbox"/> N/A Relevant images properly labeled and displayed <input type="checkbox"/> Yes <input type="checkbox"/> N/A Any equipment concerns? Anticipated Critical Events Surgeon: States the following: <input type="checkbox"/> critical or nonroutine steps <input type="checkbox"/> case duration <input type="checkbox"/> anticipated blood loss Anesthesia Provider: <input type="checkbox"/> Antibiotic prophylaxis within one hour before incision <input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> Additional concerns? Scrub and circulating nurse: <input type="checkbox"/> Sterilization indicators have been confirmed <input type="checkbox"/> Additional concerns?	Name of operative procedure Completion of sponge, sharp, and instrument counts <input type="checkbox"/> Yes <input type="checkbox"/> N/A Specimens identified and labeled <input type="checkbox"/> Yes <input type="checkbox"/> N/A Any equipment problems to be addressed? <input type="checkbox"/> Yes <input type="checkbox"/> N/A To all team members: What are the key concerns for recovery and management of this patient? June 2013
RN confirms presence of: History and physical <input type="checkbox"/> Yes Preanesthesia assessment <input type="checkbox"/> Yes Diagnostic and radiologic test results <input type="checkbox"/> Yes <input type="checkbox"/> N/A Blood products <input type="checkbox"/> Yes <input type="checkbox"/> N/A Any special equipment, devices, implants <input type="checkbox"/> Yes <input type="checkbox"/> N/A	Difficult airway or aspiration risk? <input type="checkbox"/> No <input type="checkbox"/> Yes (preparation confirmed) Risk of blood loss (> 500 ml) <input type="checkbox"/> Yes <input type="checkbox"/> N/A # of units available _____ Anesthesia safety check completed <input type="checkbox"/> Yes Briefing: All members of the team have discussed care plan and addressed concerns <input type="checkbox"/> Yes	Anticipated Critical Events Surgeon: States the following: <input type="checkbox"/> critical or nonroutine steps <input type="checkbox"/> case duration <input type="checkbox"/> anticipated blood loss Anesthesia Provider: <input type="checkbox"/> Antibiotic prophylaxis within one hour before incision <input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> Additional concerns? Scrub and circulating nurse: <input type="checkbox"/> Sterilization indicators have been confirmed <input type="checkbox"/> Additional concerns?	June 2013

71 % Compliance after unit education
10 Errors found first audit
3 Errors found second audit

Summary/Discussion

- Next Steps:**
 - Create and implement strategies to increase structure and participation in debriefs. Determine how to minimize distractions
 - Track number and type of errors during invasive procedures.
 - Correlate surgical errors to presence or absence of AORN debrief checklist
- Barriers of this Study:**
 - Lack of time to complete a post survey
 - Lack of participation by surgical staff
 - Lack of access to information regarding errors

Conclusion

- Rates of intraoperative errors can be lowered with the completion of and adherence to a standardized debrief checklist
- The largest barriers to debrief completion were identified to be a lack of participation, distractions, and miscommunication
- Written education provided to RNs will help outline why a thorough post-operative debrief should be a priority in the clinical setting
- Post education results pending

References

- Gerhardt, A. (2018). Using Safety Checklists Outside of the Operating Room. *UNM Digital Repository*. Retrieved from <https://digitalrepository.unm.edu/cgi/viewcontent.cgi?referer=http://www.google.com/url?sa=t&rect-j&q=&esrc=s&source=web&cd=1&ved=2ahUKewj7wd6M1Y7iAhWIsBKHAs-A>
- Pelletier, M. G. (2018). 7 Reasons Your Surgical Team Should Debrief for Every Patient, Every Time. Retrieved October 10, 2019, from https://www.jointcommission.org/the_view_from_the_joint_commission/7_reasons_your_surgical_team_should_debrief_for_every_patient_every_time/