

# 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
  - o 5% of these are performed on the wrong patient
  - o 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**

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)	i				
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			p		
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)					
approate to minute any time;					
Comments:					

Auditor:	itor: Case 1 MR #		Case 2 MR#	
Date:	Yes	No or N/A	Yes	No or N/A
Actual procedure done				
EBL				
Emergence/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:				
Auditor:	Case 1 MR #		Case 2 MR#	
Additor.			MR#	
		No or N/A	MR# Yes	No or N/A
Date:	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL	MR#	No or N/A		No or N/A
Date: Actual procedure done	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing Equipment	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing Equipment Position restrictions	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing Equipment Position restrictions Specimens Case Review: CST, Circulator, Anesthesia, Surgeon, Others(as needed)	MR#	No or N/A		No or N/A
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing Equipment Position restrictions Specimens Case Review: CST, Circulator, Anesthesia, Surgeon, Others(as needed) Next Case: ABX, Position, Table, Anesthesia,	MR#	No or N/A		
Date: Actual procedure done EBL Emergence/Recovery Concerns Foley/Drains/Packing Equipment Position restrictions Specimens Case Review: CST, Circulator, Anesthesia, Surgeon, Others(as needed)	MR#	No or N/A		No or N/A

## **Educational Pamphlet**

PREPROCEDURE CHECK-IN	SIGN-IN	TIME-OUT	SIGN-OUT  Before the Patient Leaves the Operating Room RN confirms:	
In Holding Area	RN and anesthesia care provider confirm:	Before Skin Incision		
Patient/patient representative actively confirms with Registered Nurse (RN):		Initiated by designated team member  All other activities to be suspended (unless a life-threatening emergency)		
Identity □ Yes Procedure and procedure site □ Yes Consent(s) □ Yes Site marked □ Yes □ N/A by person performing the procedure  RN confirms presence of: History and physical □ Yes Preanesthesia assessment □ Yes  Diagnostic and radiologic test results □ Yes □ N/A  Blood products □ Yes □ N/A  Any special equipment, devices, implants □ Yes □ N/A  Include in Preprocedure check-	Confirmation of: identity, procedure, procedure site and consent(s)	Introduction of team members   Yes  All:  Confirmation of the following: identity, procedure, incision site, consent(s)    Yes  Site is marked and visible   Yes   N/A  Relevant images properly labeled and displayed   Yes   N/A  Any equipment concerns?  Anticipated Critical Events  Surgeon:  States the following:    critical or nonroutine steps   case duration   anticipated blood loss  Anesthesia Provider:    Antibiotic prophylaxis within one hour   before incision   Yes   N/A  Additional concerns?	Name of operative procedure Completion of sponge, sharp, and instrument counts   Yes   N/A Specimens identified and labeled Yes   N/A Any equipment problems to be addressed? Yes   N/A  To all team members: What are the key concerns for recovery and management of this patient?	
in as per institutional custom:  Beta blocker medication given  (SCIP) □ Yes □ N/A  Venous thromboembolism  prophylaxis ordered (SCIP)  □Yes □ N/A  Normothermia measures (SCIP)  □ Yes □ N/A		Scrub and circulating nurse:  Sterilization indicators have been confirmed  Additional concerns?	<b>₹</b> AORN	

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 <a href="https://digitalrepository.unm.edu/cgi/viewcontent.cgi?referer=http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwj7wd6MtY7iAhWardthandarden.cgi.net.cgi?referer=http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwj7wd6MtY7iAhWardthandarden.cgi.net.cgi?referer=http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwj7wd6MtY7iAhWardthandarden.cgi.net.c
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