

Converting Surgical Services Handoff from Paper to Electronic

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Purpose and Significance

The current practice in Surgical Services at Mayo Clinic in Arizona utilizes both paper and verbal handoffs during the transfer of care. Medication inconsistencies and documentation errors with the current handoff practice were brought forward to Nursing Informatics. In July 2015, a workflow change was implemented, however documentation errors continued.

According to Joint Commission (2012), verbal and paper hand-off communications account for 80% of serious medical errors and are proven to be ineffective, inaccurate, and inconsistent. Joint Commission (2012) recommends "synthesizing patient information from separate sources before passing it on to the receiver" (p. 3). Additionally, AORN (2015) supports the use of a standardized electronic handoff to improve "accuracy, reliability, and quality of information" (para. 1). Furthermore, standardization eliminates reliance on memory, workarounds and shortcuts (Chard, 2010).

Goals

Electronic Handoff Project Aims to:

- Improve efficiency for handoffs
- Reduce miscommunications
- Consolidate essential information into one view

PICO

For patients in Surgical Services in which electronic handoff is utilized, is the risk of unplanned events, near misses, and medication errors decreased compared with the current paper handoff?

Methods

- Obtained leadership approval and support
- Collaboration with report writer for development of tool that pulls essential information from the EHR
- Included prompts for communication of crucial information not included in the EHR

TESTPT, AZKATIE		DroOn	OD Handoff			
VERIFICATION PreOp -> OR Handoff			PATIENT ASSESSMENT			
Surgeon:	Surgeon MD			Last Food Intake:	09-Mar-2016 18:00	
Anesthesiologist:	Anesthesia MD			Last Fluid Intake:	09-Mar-2016 23:00	
Post Anes Level of Care:	Recovery Track I: May discharge from PACU following TWO 30 min RSA evaluations without episode			High Calorie Drink Ordered Prior to the Scheduled		
Scheduled Procedure:	Transplant, Kidney Recipient Renal Transplantation					
Consent:				Procedure?		
Allergies:	codeine			OSA Score:	5	
	shellfish Anaphylactoid shock			Uses Home CPAP/BiPAP:		
Site Marked:	No documentation available or N/A 04-Mar-2016			Pacemaker RN Notified/Evaluated:	Communicate if patient has a pacemaker and if	
H&P:					the pacemaker nurse interrogated the device	
Update Note (Yellow Sheet):	Communicate status with the OR RN	us with the OR RN			preoperatively	
Isolation Type:				Skin Integrity	Other: abrasion on right elbow	
Surgical Delay?	Discuss with OR RN and collaborate on the	ne delay code if applicable		Skin Prep/Clip:		
MEDICATIONS				Teds/SCDs:	Anti-Embolic Hose Knee Bilateral	
Anticoagulant/Last Dose:					Pneumatic Compression Device Application	
Beta Blocker/Last Dose:	metoprolol 10-Mar-2016 05:30				Knee Bilateral	
Exparel/Last Dose:	08-Mar-2016 08:00			Medication Patch On:	Yes	
Lidocaine/Date & Time:	10-Mar-2016 09:20			Hearing Aids	Dentures Yes To OR	
IV gtts	sodium chloride 0.9% 1000ml	Begin Bag	10-Mar-2016 09:20	/Dentures/Glasses/Jewelry:	Jewelry Yes Family	
/Concentration/Rate:	Socialiti Chioride 0.970 Toodiiii	Degiii Dag	10-1viai-2010 09.20		Contacts Yes Belongings Bag	
Pre-Op Medications/Antibiotics GIVEN:	 ACETAMINOPHEN TAB, 325 mg 2 Tab diphenhydrAMINE CAP, 50 mg 1 Cap LIDOCAINE 1% MPF INJ, 2 ml 0.1 mL 	650 mg 50 mg 0.1 mL	10-Mar-2016 09:30 10-Mar-2016 09:30 10-Mar-2016 09:20	Metal/Implants:	 Hip: Right Hip Knee; Right Knee Other: Artificial Genitourinary Sphincter 	
Pre-Op Medications/Antibiotics NOT GIVEN:	 ceFAZolin Not Given: Medication Sent to OR methylPREDNISolone SODIUM SUCC INJ Not Given: Medication Sent to OR 			High Risk Indicators/Special Considerations	Cardiac StentsDiabeticRenal FailureFall History	
Pre-Op	ALEMTUZUMAB INJ 1 ml			Interpreter:	Yes	
Medications/Antibiotics				Last Void:	10-Mar-2016 09:00	
NOT DOCUMENTED AGAINST:				Family Present:	Spouse; 480-867-5309	
Transplant Medications:	Communicate if medications given or not given. If medications not received by pharmacy prior to leaving PreOp area, advise OR RN that MAR entry needs to be documented against.			LINES/TUBES/DRAINS		
1.4.00				Vascular/Arterial/Central Access:	Right Forearm 16g	
LABS		11.0	N. C			
Point of Care Urine Pregnancy Testing:	10-Mar-2016	U Preg POC	Negative	Tube/Drains/Catheter/Chest Tubes:		
Point of Care Gucometer:	10-Mar-2016 09:00	81			Communicate if Anesthesia performed a block preoperatively and include the type and location	
Pending Labs:	10-Mar-2016 09:30	K	In Process			
Labs:	10-Mar-2016 09:00	U Preg POC	Negative			
Type and Screen:	10-Mar-2016 06:30 ABO Group Antibody Screen Rh Type	B NEG POS		Regional Block/Type/Location:	Communicate if Anesthesia performed a block preoperatively and include the type and location	
	Type and Screen Expiration	03/13/2016 23:59		Insulin Pump:		

TESTPT, AZKATIE OR -> PACU Handoff			PATIENT HISTORY		
Post Anes Level of Care:	Recovery Track I: May discharge from PACU	following TWO 30 min RSA evaluations without episode	OSA Score:	5	
Allergies:	codeine	Hives	Uses Home CPAP/BiPAP:		
	shellfish	Anaphylactoid shock	Insulin Pump:		
solation Type:			Point of Care Gucometer:	10-Mar-2016 12:25 72	
nterpreter:	Yes		Metal/Implants:	Hip: Right Hip	
OR DOCUMENTATION			Knee; Right KneeOther: Artificial Genitourinary Sphincter		
Surgeon:	Surgeon MD				
Procedure:	Transplant Kidney Recipient Live Donor		High Risk Indicators/Special Considerations	 Cardiac Stents Diabetic Renal Failure History of Falls 	
Positioning:	Body PositionLt Arm PositionLt Leg Position	Supine Padded Armboard Straight - No Additional Padding			
	Rt Arm PositionRt Leg PositionPositioning Device	Padded Armboard Straight - No Additional Padding Safety Strap	Vascular/Arterial/Central Access:	Right Forearm 16g	
Site Assessment:	Perform site assessment with receiving RN		Skin Integrity	Other: abrasion on right elbow	
Sedation Administered in OR: (RN Sedation Case)	-		Family Present:	Spouse; 480-867-5309	
Local Anesthetic/Exparel:			Hearing Aids	Dentures Yes To OR	
Dressing/Dermabond/Steri- Strips/Packing:	Prima-pore	Operative Site	/Dentures/Glasses/Jewelry:	Jewelry Yes Family Contacts Yes Belongings Bag	
Tubes/Drains/Catheter/Chest Tubes	Cath,Foley 3 WayStent Ureteral	Urinary bladder Ureter		_ I	
Metal/Implants Inserted in OR:					
Change in Skin Integrity:	Communicate any changes in Skin Integrity	that occurred during the OR			
Muscle/Joint Limitations:	Communicate any muscle or joint limitation	ns .			
Hearing Aids/Dentures/Glasses/ Jewelry:	Dentures Full Set, To Post Op with Patient				
X-Ray:					

Results/Evaluation

Success of the project will be determined by comparing the occurrence rate of transplant medication errors from July 1, 2015 to the date of implementation of the new electronic form. A post implementation assessment will be conducted using the same timeframe interval.

Implications for Practice

- wrong site, wrong patient, wrong surgery events
- medication errors
- work effort
- surgical delays

Next Steps

Educate Staff on:

- Use & function of electronic handoff
- Workflow practice changes
- Requirement for EVERY patient

Go Live Support:

- Nursing Informatics
- Clinical Education

References

Association of Perioperative Registered Nurses (AORN). (2015). Guideline for transfer of patient care information: Recommendation I. AORN Guidelines for Perioperative Practice: 2015 edition.

Chard, R. (2010). Assessing perioperative RN competency; Transfer of care communication. AORN Journal, 91(4), p. 519-524.

The Joint Commission on Accreditation of Healthcare Organizations. (2012). Joint commission center for transforming healthcare releases targeted solutions tool for hand-off communications. Joint Commission Perspectives, 32(8).