Beaumont

PACU Handover QI

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Project Genesis

Approached by hospital surgical administration August 2017 to develop a Quality Improvement Project – **PACU Handover**

Perioperative Services Priorities

Patient Safety

- President and Vice President of Surgical Services endorsed effort
- Engaged multidisciplinary team to begin a deep dive into current state and develop future state

National Support

1. **Joint Commission-**National Patient Safety Goal

2. **ASPIRE -** Handoffs are a vulnerable moment for patient safety

3. **APSF** - PACU complications rate of 23% compared to intraoperative complications rate of 5%

Evidence

apsf
www.apsf.org

NEWSLETTER

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Handoff Communication: An APSF Safety Initiative and Perioperative Provider Concern

by Steven Greenberg, MD, FCCP, FCCM

The substantial number of preventable deaths and other adverse events associated with health care are now widely recognized.[1,2] Handoffs (also called handovers), or transfers in care responsibilities of various types, are among the most important contributors to these outcomes that we must strive to improve. Approximately a decade ago, The Joint Commission (TJC) reported that ineffective communication was the most common reason for sentinel events among a variety of medical specialties.[3] Subsequently, TJC made handoff communication a national patient safety goal.[3] The Accreditation Council for Graduate Medical Education (ACGME) followed suit and made handoff communication education a requirement for all accredited teaching programs in the US.[4] The reduction in resident work hours coupled with the increase in the number and variety of alternative providers participating in patient perioperative care prompted TJC, the

The APSF's mission is to continually improve the safety of patients during anesthesia care by enhancing research, education, and promoting programs that stimulate ideas for positive safety change. As one step toward fulfilling that mission, the APSF has provided funding to investigate the

ference, entitled "Perioperative Handoffs, Achieving Consensus on How to Get It Right," focused on developing a multidisciplinary consensus on critical elements for safe handoff processes (watch for the conference report in an upcoming issue). Throughout this issue of the *APSF Newsletter*, we highlight some key topics that point the way toward achieving a goal that no patient should be harmed as a result of a transfer of perioperative care. Dr. Jeffrey Cooper, renowned for his work in this field, convened several experts to describe the various types of handoffs, discuss the evidence for the process and elements of an optimal handoff, examine some challenges of implementation, and consider the creation of a multicenter collaborative to improve the education, research, and implementation of perioperative handoffs. We hope all readers will be motivated to reflect on their own handoff processes and behaviors and hope you and your organizations face the challenge of reducing harm from suboptimal handoff practices by getting involved to work for improvement.

Anesth Analg. 1992 Apr;74(4):503-9.

Complications occurring in the postanesthesia care unit: a survey.

Hines R[1], Barash PG, Watrous G, O'Connor T.

Author information

Abstract

To identify and quantitate complications occurring in the postanesthesia care unit (PACU), a prospective study evaluated 18,473 consecutive patients entering a PACU at a university teaching hospital. Using a standardized collection form, the incidence of intraoperative and PACU complications was determined. The combined PACU and intraoperative complication rate was 26.7%. Data showed a PACU complication rate of 23.7%, with an overall intraoperative complication rate of 5.1%. Nausea and vomiting (9.8%), the need for upper airway support (6.9%), and hypotension requiring treatment (2.7%) were the most frequently encountered PACU complications. Patients in whom PACU complications developed were analyzed by ASA physical status. Of all patients experiencing nausea and vomiting (n = 1571), the highest percentage were ASA physical status II patients (n = 831). Likewise, in the group of 1450 patients who demonstrated a need for upper airway support, 792 were ASA physical status II. In patients experiencing a major cardiovascular complication, for example, variables associated with a greater risk of developing any PACU complications were ASA physical status (status II), duration of anesthesia (2-4 h), anesthetic technique, emergency procedures, and certain types of surgical procedures (orthopedic or abdominal). For patients admitted with a temperature of less than 35 degrees C the duration of the PACU stay was 152 +/- 46 min compared with 116 +/- 65 min for patients with a temperature greater than or equal to 36 degrees C (P less than 0.01). In conclusion, events occurring during the PACU period continue to be a source of patient morbidity.

Sentinel Event Alert

A complimentary publication of The Joint Commission
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Published for Joint Commission-accredited organizations and interested health care professionals, *Sentinel Event Alert* identifies specific types of sentinel and adverse events and high risk conditions, describes their common underlying causes, and recommends steps to reduce risk and prevent future occurrences.

Accredited organizations should consider information in a *Sentinel Event Alert* when designing or redesigning processes and consider implementing relevant suggestions contained in the alert or reasonable alternatives.

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Inadequate hand-off communication

Health care professionals typically take great pride and exert painstaking effort to meet patient needs and provide the best possible care. Unfortunately, too often, this diligence and attentiveness falters when the patient is handed off, or transitioned, to another health care provider for continuing care, treatment or services. A common problem regarding hand-offs, or hand-overs, centers on communication: expectations can be out of balance between the sender* of the information and the receiver.[1] This misalignment is where the problem often occurs in hand-off communication.

Potential for patient harm – from the minor to the severe – is introduced when the receiver gets information that is inaccurate, incomplete, not timely, misinterpreted, or otherwise not what is needed. When hand-off communication fails, many factors are involved, such as health care provider training and expectations, language barriers, cultural or ethnic considerations, and inadequate, incomplete or nonexistent documentation, to name just a few.

What is a hand-off?

A hand-off is a transfer and acceptance of patient care responsibility achieved through effective communication. It is a real-time process of passing patient-specific information from one caregiver to another or from one team of caregivers to another for the purpose of ensuring the continuity and safety of the patient's care.[1]

This alert provides advice to **senders** and receivers of hand-off communication, including communication between caregivers within hospitals and other health care settings, as well as between hospital caregivers and those not located in a hospital. Senders are responsible for sending or transmitting patient data and releasing the care of the patient to receivers, who have been identified as those who will receive patient data and accept care of the patient. This alert makes the basic assumption that the hand-off already involves the correct receiver, sender and patient.

While it sounds simple, a high-quality hand-off is complex. Failed hand-offs are a longstanding, common problem in health care. In 2006, The Joint Commission established a National Patient Safety Goal that addressed hand-off communication. In 2010, the requirement became a standard. Provision of Care standard PC.02.02.01, element of performance (EP) 2, requires that: *The organization's process for hand-off communication provides for the opportunity for discussion between the giver and receiver of patient information. Note: Such information may include the patient's condition, care, treatment, medications, services, and any recent or anticipated changes to any of these.*

The Joint Commission

* For the purposes of this alert, the sender is the individual who provides the clinical information to the receiving caregiver.

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GOALS FOR PACU HANDOVER

- Identify a standardized process
- Set clear expectations for providers
- Utilize a standardized tool
- Engage and educate providers
- Compliance

Handover – OR to PACU

- Multidisciplinary Meetings – Fall 2017
- Preliminary audits – April 2018
- Education and video presentation – May 2018
- Implementation of Standardized Tool – June 2018
- Audit Process – July 2018

Multidisciplinary Meetings

Findings of Current Environment:

- Lack of Teamwork
  - Lack of respect
  - No discussion regarding plan of care
  - Focus on computer
  - Many distractions
- Lack of standardization
  - No consistency
  - No tool
  - No time out
  - No history from pre op
  - Unreliable information
- Production Pressure
  - Quick turn-over time
  - Priorities not aligned
- Technology
  - Staff without phones
  - Focus on computer

Multidisciplinary Meetings

Ideal Environment Goals:

- Priorities aligned
- Standardization of information
  - Handover Tool
  - Standardize process
- Effective Communication
  - Respectful
  - Accurate
  - Collegial
  - Professional

Preliminary Audits

- Assessed current state of PACU handover
- 55 total audits completed
- Audit team = 2 CRNAs, 4 PACU RNs
- Audit tools developed:
  - APSF
  - Joint Commission publication
  - MPOG

BEAUMONT

PACU HANDOFF FORM

Provider: Patient MRN: _____

Date/Time:_____ Patient Age/Gender: _____

Auditor:_____

Procedure Type:_____

Background	Yes	No	N/A
Introduction (Provider names and roles Nursing/Anesthesia/Surgery)			
Identification of Patiesn			
Pertinent PMH/PSH			
Discusssion of Procedure Performed			
Allergies			
Contact Percautions (if Applicable)			

Anesthetic Management	Yes	No
Airway Management (Mask/LMA/ETT)		
Type of Anesthetic (general vs. sedation)		
Anesthetic Complications/Primary Concerns		

Medications	Yes	No	N/A
Preoperative Meds			
Sedations medication. Reversal administered? (if applicable)			
Muscle relaxants: Time Given. Reversal administered? (if applicable)			
Pain Management			
PONV Hx & Meds Administered			

Fluids	Yes	No	N/A
Vascular Access			
Total Intraoperative Fluids/Blood Products Administered			
Intraoperative Labs (if applicable)			

Expectations/Plans	Yes	No
Allow Opportunity for questions/acknowledgement of understanding of report from receiving PACU team		

Comments ***Do Not Include Any PHI***

Confidential Peer Review

MPOG MULTICENTER PERIOPERATIVE OUTCOMES GROUP

DATE					
AREA					
RN					
CRNA					

PLEASE ANSWER YES OR NO FOR EACH ITEM BELOW

TOC BEGINS AFTER INITIAL ASSESSMENT & PATIENT IS STABILIZED					
UTILIZES STANDARDIZED TOOL					
REPORT IS FACE TO FACE					
MINIMAL INTERRUPTION/ DISTRACTIONS					
TWO WAY COMMUNICATION					
BEHAVIORAL COMPONENT					
	PATIENT STICKER	PATIENT STICKER	PATIENT STICKER	PATIENT STICKER	PATIENT STICKER

Preliminary Audit Findings

- Initial interaction
  - Chaotic
  - Distractions
  - Report not face-to-face
  - Premature start of report
- Omission of key data

Anesthesia to PACU Report:	
Contact Precautions?	
Initial	Airway: 02, Pulse Oximetry
	Monitors: BP, EKG, Temp
Introduction	
(Provider names and roles: PACU RN and anesthesia team members)	
"Are you ready for verification and report?" Computer Verification and ALLERGIES	
Background	
Communication Barriers/Special Needs	
Pertinent PMH/PSH/Labs	
Discussion of surgical / procedure course	
Anesthetic Management	
Airway management (ETT/LMA)	
Type of anesthetic	
Intraoperative labs	
Anesthetic Complications	
Medications	
Preoperative Meds (Betablocker, Resp treatment, Insulin, Abx)	
Sedation medications & amount administered. Reversal administered?	
Muscle relaxants: Time/Amount administered. Reversal administered?	
Intraoperative Pain Management	
PONV Risk & Meds Administered	
Intake & Output	
Vascular access	
Total Intraoperative Fluids/Blood Products Administered	
Urine Output/EBL	
Expectations / Plans	
Identify primary anesthesia concerns for this patient	
Allow opportunity for questions/acknowledgement of understanding of report from receiving PACU team	

Education

- Presented at multiple staff meetings
- Laminated Standardized tool at each PACU bay
- Multiple postings in common CRNA areas
- Video demonstration and power point

Implementation

- Pilot process in 2 of our 4 PACUs
- Education coaching during handover process in PACU
- Plan to begin process in final 2 PACUs in September 2018
- Continue audit schedule for one year

Audit Process

- Most important way to ensure compliance is to continually audit the process
- Audit Team = 1 manager, 3 RNs and 1 CRNA
- 5 BH audits/month per team member (25 total)
- 4 MPOG audits per month – Surgical Quality Nurse Clinicians

Results

- Began July 9, 2018
- Continue to educate
- Audit/coaching at the same time
- Added to the orientation mandatories
- Negative Feedback – too long, not necessary for each patient case, slows work flow
- Positive Feedback – thorough, easy to follow, similar to what we've been doing

Challenges

- Compliance with tool
- Changing the culture
- Skipping information
- Viewing the educational video
- Audits

Video Demonstration