Improving nursing shift handover in the ICU

Jonathan Russell, RN, MSc(A)

TAHSNp Innovation Fellowship Program, Sunnybrook Health Sciences Centre

Introduction & Background

- Clinical handover is a communication-based practice which occurs every time there is a change in practitioner
- Errors in communication were named as the second most frequent root cause of sentinel events in hospital (Joint Comission, 2014), and may result in discontinuity of care, adverse events, information breakdown, misunderstandings, and omissions.
- Handover practices remain variable and inconsistent despite acknowledgement of their importance (Reisenberg, Leitzsch, & Cunningham, 2010)
- ICU patients often have complex care plans with multiple active issues, requiring efficient transfer of information and review of risk to ensure safe transitions.
- Use of written handover tools + efficient verbal communication results in greater maintenance of relevant patient data (Pothier et al, 2005)

Objectives

- To optimize the shift handover communication through the use of a structured handover tool that defines and organizes patient information in a transmissible way.
- Main objectives for six-month Fellowship period:
  1. To develop, pilot, and test a structured handover tool in a level II ICU in order to standardize content
  2. Encourage patient and family engagement early in the care process

- Improve overall safety, communication, and patient and nursing satisfaction

Improvement

- Use targeted survey of nurses to help understand current perceptions and practices of handover in the ICU
- Develop a handover tool that captures elements of handover identified as valuable by RNs, and is in accordance with corporate transfer of accountability (TOA) policy which utilizes SBAR.
- Utilized Plan-Do-Study-Act (PDSA) cycle methodology in implementation of tool.
- Provide education on tool and pilot in the ICU
- Conduct ongoing evaluation and modify tool as necessary.

Results

- 70% of RNs surveyed said they experienced an event, or "surprise" they attributed to a deficiency in handover communication **within the last month.**
- Minimum information nurses felt was necessary to communicate in order to transfer accountability and responsibility:
  - **S**ituation
    - Reason for admission; The "story"
  - **B**ackground
    - Recent treatment(s), response(s) and events
    - Family information
  - **A**ssessment
    - Review of systems
    - Acuity and overall condition
  - **R**isks/review
    - What are the things to be aware of
    - Next steps
- The information was integrated into a comprehensive nurse to nurse handover tool:

BED #

☐ INTRODUCE TO PT/FAMILY (Use NODS)
N - Say your name
O - State your occupation
D - Describe what you will do
S - Supportively, sincerely, and with a ☺

AGE_____ SEX M/F
CODE STATUS ________ALLERGIES___________
DIAGNOSIS________________
PRIMARY SVC: TRA/NSX/___ ☐CODE STROKE
ADMITTED FROM: ☐ED ☐CRCU ☐RRT
LENGTH OF STAY________________

SITUATION **S**
STORY (WHAT HAPPENED):
INJURIES OR PROBLEM:
REASON FOR ICU ADMISSION:

BACKGROUND **B**
PMHX________________
SURGERIES/PROCEDURES________________
SAFETY/PRECAUTIONS________________ ☐RESTRAINTS
FAMILY CONCERNS________________
SERVICES FOLLOWING________________
OTHER________________

ASSESSMENTS **A**
NEURO
GCS:
Deficits:
GI
PO Status: NPO/TF/DIET_____
Feed: Rate:____cc/h
PAIN
☐APS
INFUSIONS
RESPIRATORY
Chest:
FiO2:
GU
Foley/Spont/Dialysis
MEDICATIONS
CARDIOVASCULAR
Rhythm:
MSK/SKIN
Activity:
Wounds/Dressings:
LABS
☐AccuChek q___h
LINES ☐Art. line ☐PICC/CVAD

RECOMMENDATION **R**
ACTIVE ISSUES:
☐STAY IN ICU
☐TRANSFER TO WARD
☐FOR REPATRIATION
PENDING LABS/DIAGNOSTIC TESTS________________
ANTICIPATED CHANGES OR OTHER ISSUES________________

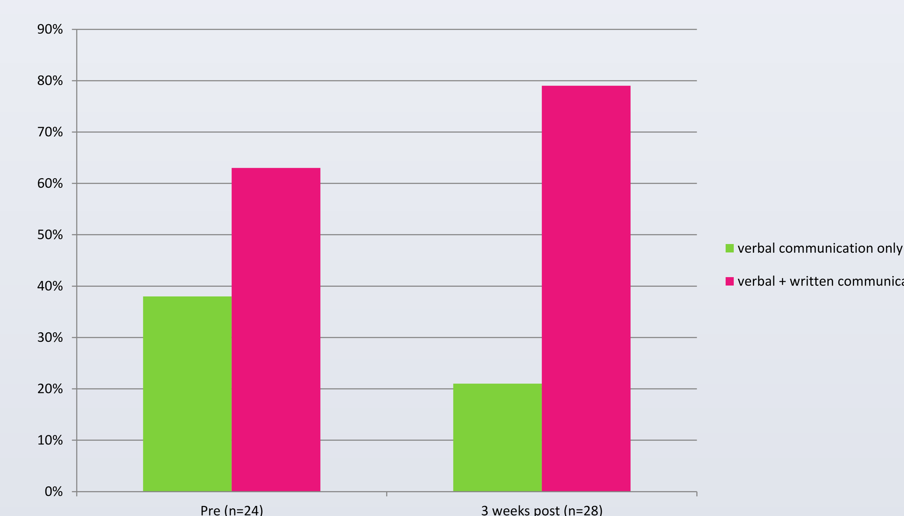
0800/2000 ____
0900/2100 ____
1000/2200 ____
1100/2300 ____
1200/0000 ____
1300/0100 ____
1400/0200 ____
1500/0300 ____
1600/0400 ____
1700/0500 ____
1800/0600 ____
1900/0700 ____ ☐REVIEW ORDERS

ISSUES FOR ROUNDS
☐ ____ (×8)

TO-DO LIST

- Group and individual education sessions were conducted over a 2 week period

Figure 1: Percentage of nurses who report using either verbal-only or written + verbal communication during handover (pre and 3 weeks post-implementation)



Qualitative feedback from RNs on the handover tool:

> "The [handover] interaction goes much more smoothly when you have something to guide your conversation. You feel better about it."

> "When everyone structures their [handover] the same way, it feels more reliable and complete without being overwhelming.

- Initial evaluation data done at 3 weeks is suggestive of increasing trend toward using verbal + written documentation during handovers
- Post implementation, an increase from 70% to > 90% completion of inter-unit TOA
- Handover is a method of engaging patient and family members in the care process
- Staff responded positively to initial implementation of the tool, suggesting that it would help reduce ambiguity and redundancy of information.
- Additional evaluation to take place at 3, 6 and 12 months post-implementation to assess effect on clinical errors related to insufficient information.

Project Impact & Plan for Sustainability

- Sustained use of handover tools that standardize content may improve nurse-nurse communication and lead to a decrease in adverse events related to deficiencies or omissions in handover communication.
- The paper handover tool will serve to inform an electronic TOA document which will be incorporated into the electronic medical record. The tool can be used as an interim data set in the development of the EMR handover function.
- Integration of handover communication into unit orientation plan will support a consistent approach to handovers.
- Connect with senior management to organize a "handover awareness" month at regular intervals to encourage units to collect new data and update or improve their processes as necessary.

Future Recommendations

- Modify the handover tool as needed, maintaining the minimum data set, to make it applicable to other transitional care points.
- Incorporate an element of handover communication into unit-based orientation program.
- Develop an electronic transfer of accountability (TOA) form for integration into the electronic medical record (EMR).
- Apply findings to other transitional care points across the larger organization through collaboration with Transfer of Information Working Groups and practice councils.

References

- Joint Commission (2014) Sentinel Event Unit. Sentinel Event Data Root Causes by Event Type 2004-2013.
- Reisenberg, LA., Leitzsch, J., & Cunningham, J.M. (2010) Nursing handoffs: a systematic review of the literature. *American Journal of Nursing,* 110, 24-34
- Pothier, D., Monteiro, P., Mooktiar, M., & Shaw, A. (2005). Pilot study to show the loss of important data in nursing handover. British Journal of Nursing, 14(20), 1090-1093.

Acknowledgements

Toronto Academic Health Science Network
Collaborative Academic Practice
Dr. Kathryn Nichol
Barb Duncan
Dr. Andre Amaral
Nicky Holmes, B5ICU
Deb Carew, TECC
B5ICU RNs and fellows

- For more information on this project contact jonathan.russell@sunnybrook.ca

RESEARCH POSTER PRESENTATION DESIGN © 2012
www.PosterPresentations.com