RN-to-RN Shift Report:

Moving to the Bedside

(an evidence-based approach)

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Effective communication is a critical nursing skill. Shift change is a time where nurses exchange vital patient information.

According to the American Nurses Association, it has been estimated that up to 80% of serious medical errors involve miscommunication between caregivers when patients are transferred or handed off. In addition to patient harm, defective hand-offs can lead to delays in treatment, inappropriate treatment and increased length of stay in the hospital (ANA 2012).

Bedside handoff, along with the utilization of a standardized method of reporting such as SBAR, along with additional tools, such as an electronic supporting tool that contains a comprehensive set of information, has been shown to promote safety, patient-centered care and is vital in meeting the National Patient Safety Goals established by the Joint Commission.
Background and Significance of Problem:

As defined by the Australian Medical Association, clinical handover is the transfer of the responsibility and accountability for aspects of patient care to another person on either a temporary or permanent basis (Australian Medical Association 2006, Fenton 2006). Effective communication is a critical nursing skill. Shift change is a time when nurses exchange vital patient information.

The RN-RN patient handoff has been identified as a major “break in the link of patient care that is clearly vulnerable to communications errors” (Triplett & Schuveiller, 2011).

A combination of oral and written communication can present the greatest chance for information retention. Typed information sheets may help to transfer 100% of information being handed over after five handover reports (Pothier et al. 2005). Some studies suggest development of a minimum data set (MDS) to be used in conjunction with an electronic handover system that complements the structured content approach with verbal nursing handover (Jefferies & Nicholls, 2012).

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More than 3000 root cause analyses that were reviewed between 1995 and 2005, indicate that communication was identified in 65% to 70% of cases as the primary contributor to an adverse patient event (Triplett & Schuveiller, 2011).

As many as 98,000 deaths annually, in the USA, occur as a consequence of errors. The associated cost for these errors ranges from $8 billion to $29 billion annually (Kohn et al, 2000).

Research has shown that bedside handoff, along with the utilization of a standardized method or reporting such as SBAR, along with additional tools, such as an electronic supporting tool that contains a comprehensive set of information, has been shown to promote safety, patient-centered care and is vital in meeting the National Patient Safety Goals established by the Joint Commission.

Hand-off report that occurs at the nurses’ station or in conference rooms, with no involvement from the patient, can lead to confusion about treatments or diagnosis, errors, and an overall dissatisfaction with the exchange of information and communication between the nurse and patient (Reinbeck & Fitzsimons, 2013).
Patient handoff between nurses continues to be an important process in clinical nursing. Handoff allows nurses to exchange vital patient information that is necessary to ensure continuity of care and patient safety. Performing handoff at the bedside allows the oncoming nurse to visualize the patient, ask questions, assess for patient safety and encourage patients to be actively involved in their plan of care. Bedside handoff promotes patient safety and allows the patients to have input and correct any misconceptions. This practice is vital in meeting the Joint Commission’s 2009 and 2010 patient safety goals (Maxson, P., Derby, K., Wrobleski, D., Foss, D., 2012).

In the report, “What did the Doctor Say?: Improving Health Literacy to Protect Patient Safety”, The Joint Commission advocates for healthcare facilities to “create organization cultures of safety and quality that value patient-centered communications as an integral component of delivering patient-centered care”.

Bedside handoff has proven to be effective in helping the nurse to prioritize the work shift due to having visualized the patients. An unanticipated finding was improved physician satisfaction due to nurses being more prepared to respond to questions shortly after shift change (Maxson et. al, 2012).

Based on the potential dangers of the loss of data during shift handover, one study was performed to determine the data lost for various methods of handover after five cycles. After only three handoff cycles, all data was lost for the completely verbal method, while
only 31% of data was correctly transferred after five cycles of traditional note taking style. A typed handoff sheet revealed minimal data loss when compared to the other methods (Charlton, K. 2012).

Adverse events resulting from faulty communications are a leading cause of death and injury in hospitals in the U.S. Empirical evidence exists to support interventions that are aimed at preventing such occurrences. An NQF (National Quality forum) report in 2005 recommends “a standardized approach to handoff communications as 1 of 30 high-priority practices that have strong evidence base, can be generalized, and are likely to benefit patient safety if implemented (Dufault, Duquette, Ehmann, Hehl, Lavin, Martin, Moore, Sargent, Stout and Willey 2010).

According to Patterson, effectiveness and efficiency improved when handoffs were in the same order, were face to face, were verbal and were done in a location with limited distractions and interruptions. In addition, these handoffs provided a summary, a plan and goals (Patterson et al., 2004).

According to Anderson and Mangino (2006), it was found that bedside reporting resulted in decreased incidental time, took less overall time, and assisted the nurses in prioritizing their work due to the ability to visualize all patients within the first half hour of the shift (Dufault et al., 2010).
Satisfaction was also improved in the following areas:

- Physicians reported more informed nurses.
- Patient satisfaction improved around keeping patients informed, how well staff worked together in caring for patients, and the perception of patient inclusion in the decision making process, including decisions about the patients’ treatment (Dufault et al., 2010).
- In addition, patient stress concerning transitioning to the next shift can be greatly reduced through bedside hand-off.

Another study indicates that bedside shift reporting has shown an increase in the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) scores in the four communication domains of: “Communication with nurses” (8% improvement), “Nurses treat with courtesy/respect” (10% improvement), “Nurses listen carefully” (7% improvement), Nurses explain in a way you understand” (11% improvement) (Reinbeck & Fitzsimons, 2013).
Review of the Evidence:

Search Methods:

The article search focused on studies that were published within the last five years (2008-2013). Databases utilized included: Cinahl, EBSCOhost Nursing Reference Center and the Joanna Briggs Foundation. The following keywords and search terms were used: RN Shift Reporting, Handoff, Shift Handoff, Bedside Handoff, Joint Commission, nurse-to-nurse report, SBAR, SBAR reporting, electronic reporting.

Inclusion criteria involved published articles that were written in English and had a clear abstract related to the search criteria. Nine articles met the inclusion criteria.

Order to present data:

- Effective Communication Issues
- Effects of poor hand off communication
- Evidence-Based Handoff recommendations (SBAR, Bedside, Verbal with written component).

In summary, all of the nine articles selected supports the shift to bedside reporting during RN-to-RN handoff. One additional study failed to find benefit in bedside handovers. Of interest in the study that “fails to find benefit in bedside handovers” is that the url link for additional information links to an article that fully supports bedside handovers.
Review of the relevant articles:

Levels of Evidence:

Level I: Evidence from a systematic review of all relevant randomized controlled trials (RCT's), or evidence-based clinical practice guidelines based on systematic reviews of RCT's

Level II: Evidence obtained from at least one well-designed Randomized Controlled Trial (RCT)

Level III: Evidence obtained from well-designed controlled trials without randomization, quasi-experimental

Level IV: Evidence from well-designed case-control and cohort studies

Level V: Evidence from systematic reviews of descriptive and qualitative studies

Level VI: Evidence from a single descriptive or qualitative study

Level VII: Evidence from the opinion of authorities and/or reports of expert committees

As described above, a published literature review was completed and a number of articles fit the inclusion criteria. The articles are as follows:

1. “Improving the patient experience through bedside shift report” (Level VII)
   Design: Expert opinion with implementation of evidence-based research.

2. “Nursing Report: Patient Hand-Off” (Level V)
   Peer Reviewed. Systematic review of 95 articles on patient hand-off.

3. “Review: bringing patient safety to the forefront through structured computerisation
during clinical handover” (Level I)
Design: Integrative literature review. Position article. Multiple electronic databases using the terms: nursing handover, handoff, shift-to-shift reporting and change of shift report. Experimental and non-experimental studies are part of the literature review. Databases utilized: CINAHL, Medline, Embase, Pubmed. 304 sources retrieved. Key search terms were used along with manual searching and 126 published articles were identified.


5. “Bedside Nurse-to-Nurse Handoff Promotes Patient Safety” (Level VII)
Peer Reviewed, Journal Article. Literature review performed from CINAHL and Medline. Reports limited to English language journals published from 1998 to 2012. 243 Abstracts reviewed and eight articles selected that were appropriate for Bedside Nursing Handoff. Limitations of article: Convenience sample from one 11-bed surgical unit.

6. “Bedside Shift-to-Shift Nursing Report: Implementation and Outcomes” (Level IV)
7. “Nursing: Clinical Handover. (Level VII). Joanna Briggs Institute Journal article. Observational studies, Non-analytic studies or articles based on expert opinion, two systematic reviews, and a guide to improving handover

8. “Developing a minimum data set for electronic nursing handover” (Level IV) Design: Observational design. Scope of information presented at handover was identified in relation to a generic ‘Nursing handover minimum data set’. 195 (n=195) patient handovers were observed and recorder across diverse specialties.


Review and presentation of the literature focuses first on identifying the problem of ineffective communication at nurse-to-nurse shift report or handoff. The literature review and presentation continues with identifying the benefits of moving to bedside RN-to-RN shift reporting, specifically following the SBAR (or ISBARQ) format. All articles acknowledge the need for effective communication during nurse-to-nurse shift report.
Review of standards of practice, practice guidelines, patient data as appropriate:

RN-to-RN Shift reporting has historically taken place away from the patient. Traditionally, the reporting has involved a verbal face-to-face report of the oncoming nurse with the departing nurse. Information exchanged consists of the patient’s medical history, the patient’s current condition and medical treatments. Some facilities use tape-recorded reports. One article titled, “Nursing Report: Patient Hand-off”, reviewed 95 articles focused on patient hand-off and found little research on identifying best practices. The article also pointed out that nurses receive little training in performing hand-off reports (Smith, 2012).

There may be a 100% loss of information after five handover reports if nurses rely solely on verbal modes of communication. In contrast, there is a greater chance of retention of information if nurses combine both oral communication with a typed handover sheet (Pothier et al. 2005).

The article by Triplett and Schuveiller (2011) identifies issues within the critical care area during hand-off. These issues included inconsistent bedside handoff with staff and confusion. Barriers identified in effective nursing handoffs include interruptions, lack of standardized reporting, and poorly developed information and communication technology. A study by Cohen & Hilligoss suggested that handoffs are poorly defined in health care settings.
Barriers to effective hand-offs include the following: (Runy, 2010)

- Lack of education at nursing schools
- Lack of time for nurses to devote to patient hand-off
- Problems in the physical setting, including background noise and interruptions
- Language barriers between clinicians or use of ambiguous terminology and abbreviations
- Failure in type of communication (e.g., inability to locate the patient data flow sheet or failure of an electronic charting system)

Other barriers to bedside hand-off include concerns of privacy. One report suggested reviewing the diagnosis outside of the patient’s room or making reference to the diagnosis and other private items on a pre-printed sheet.

Tips for effective handoffs include: (Runy 2010)

- Allow for face-to-face hand-offs whenever possible
- Ensure two-way communication during the handoff process
- Allow as much time as necessary for handoffs
- Use both verbal and written means of communication
- Conduct patient handoffs at the patient bedside whenever possible; involve patients and families in the handoff process
- Incorporate communication techniques in the process and require a verification process to ensure that information is both received and understood
- Use available technology (e.g., electronic medical record) to expedite the exchange of timely, accurate information
In the article “Bedside Shift-to-Shift Nursing Report: Implementation and Outcomes” (Evans et al., 2012), a Report Script was developed to better allow for consistency in the bedside report.

The script contained the following info:

Patient Introduction:
- Preferred name, age, diagnosis (or reference to diagnosis on pre-printed form), and code status if known

Pain Management/Vital Signs:
- Patient pain rating, pain management interventions, physiological effects of interventions

Fluid Intake/Output:
- Fluid restrictions, intravenous infusion solutions and rates, surgical drains

Skin and Wound Assessment and Care:
- Current status of patient skin, risk for acquisition of pressure ulcers, interventions to prevent pressure ulcers, wound assessment and location, prescribed treatments and schedule

Glucose Monitoring and Management:
- Serum glucose values, frequency of monitoring, management and evaluation of interventions

Cognitive/Perceptual:
- Mental status, pain description, and therapies (if not mentioned previously)
Activity/Exercise:

- Assessment of circulation, muscle strength, tolerance of activities, staff assistance required to ambulate

Elimination:

- Bowel sounds, nausea/vomiting, stool color/consistency, urine color/consistency

Nutrition:

- Diet status, plan for advancing diets

Fall Risk:

- Patient risk for falls, related interventions (low bed, restraints, sitter, etc.)

Other:

- Discharge plan, scheduled tests and procedures, documentation needs, education needs, equipment needs

Labs:

- Pertinent lab values

This same article also points out that during the trial of the bedside handoff, several instances resulted in rapid response team calls due to changes in patient condition from last visualization to time of the bedside report. The bedside reporting allowed for earlier visualization of all patients.

Another significant issue arose during the implementation of bedside reporting. Some patients tended to monopolize the report conversation. Staff was therefore encouraged to inform the patients that the nurses first had to discuss a few points and
would then address non-urgent topics raised by the patients. Other staff members voiced concern that conducting the report in a semi-private room would violate HIPAA. The institution’s risk management staff reviewed the process and recommended that potentially sensitive or private information (e.g., infectious diagnosis, psychosocial matters, etc.) would be discussed in private conference room space. (Evans et al., 2012). Other articles suggested referencing this information on a pre-printed report.

Another article focused on developing a minimum data set for electronic nursing handover. The initial data fields and items included: (Johnson, M., Jefferies, D., & Nicholls, D., 2012)

- bed number
- patient identification
- reason for admission or diagnosis
- presenting problem
- procedure(s)
- relevant clinical history
- resuscitation/code status
- clinical status (comment about whether the patient is stable or deteriorating)
- care plan
- goals of the shift
- outcome of care
- skin integrity
- discharge planning
- estimated discharge date
According to McMurray et al (2010), researchers have attempted to address inconsistencies of RN-to-RN shift handoffs by developing minimum data sets and standard operating protocols. One approach that is widely used is SBAR or SBARR (Situation, Background, Assessment, Recommendation and Response). By using this method, the inputs and outputs are formalized and it has the advantage of creating trust within the team. All team members are provided with objective information in a mutually respectable context (Shortell & Kaluzny 2006).

According to Runy (2010) and the Joint Commission International (2007), some institutions prefer to add an I and a Q to the SBAR process for more complicated situations. The Assessment would read as follows:

**I: Introduction** (individuals involved in the handoff identify themselves, their roles, and jobs)

**S: Situation** (complaint, diagnosis, treatment plan, and the patient’s wants and needs)

**B: Background** (vital signs, mental and code status, list of medications, recent labs)

**A: Assessment** (current caregivers’ assessment of the situation)

**R: Recommendation** (identify pending lab results and what needs to be done over the next few hours and other recommendations for care)

**Q: Question and Answer** (an opportunity for questions and answers is built into the handoff process)
Conclusion:

Numerous studies have shown that the process of RN-to-RN handover remains unstructured, informal and prone to errors (Bomba & Prakash 2005). It has been reported that the health care sector can benefit from the communication science developed in other high-risk industries (Kohn et al. 2000, Patterson et al. 2004).

JCAHO looked to the aviation industry and directly to crew resource management (CRM) to help develop appropriate methods for communication misgivings (Hohenhaus et al. 2006). Key points identified in effective shift handover communication, according to Lardner (1996) include: 1. presenting information via multiple media (e.g., verbal and written); 2. two-way communication with feedback to increase the accuracy of communication; 3. verbal, face-to-face handover communication is desirable; 4. only key information should be presented and irrelevant information excluded. The use of checklists and documented emergency procedures lend themselves to the use of computers.

Bedside RN-to-RN shift hand-off has been shown to reduce the length of time needed for hand-off. "Using a standardized method such as SBAR, a systematic process was created that eliminated impertinent information. By taking reports to the bedside, interruptions from physicians and phone calls, which frequently affected the old method of reporting, were greatly reduced. Reports became a streamlined and efficient process. The length of time for report was also reduced (Reinbeck & Fitzsimons, 2013).
The article titled, “Bedside Shift-to-Shift Nursing Report: Implementation and Outcomes”, illustrates the empirical results of a reduction in average observed report time from 45 minutes in 2007 to 29 minutes in 2008 after implementation of bedside reporting. Additionally, nursing satisfaction with the report process increased from 37% in 2007 to 78% in 2008 after implementation. Noted in this article is that “improved prioritization of the workflow means the most acute patients are seen first after report and patients in the assignment are seen within the first half hour of the shift, and oncoming nurses are able to visualize the patient themselves rather than rely on comments from colleagues” (Reinbeck & Fitzsimons, 2013). By visualizing the environment during report, nurses are able to make checks of the IV line, site, fluids and ask pertinent questions of their patients and colleagues. The decrease in report time allows exiting nurses to more easily end their shift on time, reducing incidental overtime and allowing direct patient care to begin sooner for the oncoming shift (Reinbeck & Fitzsimons, 2013).

Bedside handoff can help to promote patient safety. It encourages patient and family involvement in the handoff procedure and gives patients and family an opportunity to clarify and correct misconceptions and inaccuracies (Maxson et. al, 2012).

“Whilst there are multiple variations and differing modes to nursing handover, the literature clearly lacks studies to identify the content and standardization requirements of handover, the core elements of computerization. To develop e-health solutions that will move nursing forward into an information technology age, understanding the content
and the nuances of the nursing handover is crucial” (Matic, J., Davidson, P., & Salamonson, Y, 2011).

In conclusion, the evidence researched through literature review clearly supports a combination of structured (e.g., SBAR), verbal and written, face-to-face, bedside shift reporting. The evidence suggests that combining these factors into a shift report will provide the greatest opportunity for patient safety, and increased nurse, patient and family satisfaction. Standardization and the use of checklists lends itself to the increased efficiency and accuracy of computerization.
References:

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