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Preventing Blood Component Administration Errors

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Internship: Clinical Nurse Leader

N653

Carlee Stewart

April 16, 2016

Preventing Blood Component Administration Errors

Clinical Leadership Theme

Patient safety is crucial to healthcare quality and is a main concern for healthcare organizations around the world. "Patient safety is a fundamental aspect of care delivery that underpins the continual need for quality improvement initiatives. Patient safety is embedded in a system of processes that encompass a robust incident management infrastructure and an open culture of learning supported by a clinical governance framework" (Cottrell & Davidson, 2013, p. 41). The theme for this project, interaction, comes from the Institute for Healthcare Improvement's Idealized Design of Clinical Practice (IDCOP) program. Interaction deals with customized communication and interaction technology. The blood component administration process in the inpatient acute care hospital setting is dependent upon the systematic function of both communication and interaction technology. Therefore IDCOP's Interaction provides the clinical framework for this project and is appropriate for a project of this nature (Nelson, Batalden, & Godfrey, 2007).

Implementing evidence-based practice is a challenge but improves patient outcomes, standardizes care, and decreases patient care costs. Understanding how care interventions work and how to implement them is important to compete in today's health care market. Essential 3: quality improvement and safety provides the CNL framework and foundation utilized for this project, as it is a multifactorial framework that aims at promoting a system approach to preventing and reducing harm to patients. Key areas of focus included; using performance measures to assess and improve the delivery of evidence-based practices and promote outcomes that demonstrate delivery of higher-value care, the performance of a comprehensive microsystem assessment to provide the context for problem identification and action, used evidence to design

and direct system improvements that addressed trends in safety and quality, implemented quality improvement strategies based on current evidence, analytics, and risk anticipation, promoted culture of continuous quality improvement within a system, applied just culture principles and safety tools, such as Failure Mode Effects Analysis (FMEA), to anticipate, intervene and decrease risk, demonstrated professional and effective communication skills, including verbal, non-verbal, written, and virtual abilities, evaluated patient handoffs and transitions of care to improve patient outcomes (AACN, 2013).

Statement of the Problem

Blood transfusions are a routinely performed life saving intervention in the inpatient acute care hospital setting. Although blood transfusions can be extremely beneficial when delivered correctly, the risks associated with receiving incorrect blood components are severe and potentially fatal. Even a small gap or oversight in the delivery process presents an increased risk of harm to patient safety (Cottrell and Davidson, 2013). Acute complications of transfusions occur during transfusions or within hours of being transfused. Complications associated with transfusions include, acute lung injury, air embolism, anaphylaxis, bacterial contamination, febrile non-hemolytic reaction, hypothermia, citrate toxicity, hyperkalemia, impaired oxygen delivery, mild allergic reaction, and volume overload. While mild allergic reactions are most commonly seen at the bedside nurses must be able to recognize and detect changes timely to increase patient survivability.

System safety helps us to identify, assess and control hazards before they cause harm. Joint Commission in 2001 mandated healthcare organizations to proactively address patient safety using system safety tools such as Failure Modes and Effects Analysis (FMEA). “The FMEA is a systematic, proactive method for evaluating a process to identify where and how it

might fail and to assess the relative impact of different failures, in order to identify the parts of the process that are most in need of change"(IHI, 2015).

A FMEA was conducted to review the quality of our patient safety initiatives for an effective blood component administration process and workflow utilized by healthcare workers in the inpatient acute care setting. More specifically, we reviewed the processes and workflows associated with ordering, dispensing, administering, and monitoring of blood components to ensure healthcare workers were using effective safe processes set forth by the organization and were able to identify, prevent and manage errors timely when they occur. Our team identified, through the FMEA process, key failure modes within both the current and planned system, which led us to this project.

Project Overview

Nestled in the heart of a major urban city, the Adult Critical Care microsystem presented in this assignment resides in the complex adaptive system (CAS) associated with the inpatient hospital setting. This particular microsystem is considered to be a mixed closed, thirty-four bed unit, consisting of both medical surgical (MS) and neurosurgical (NS) patients. Divided by a large hallway, the microsystem is separated into two equal sides with seventeen beds on each. The role of clinical microsystems in acute care is to plan for the unexpected, to anticipate and to rehearse for the foreseeable surprises, and to learn quickly from successes and failures. In this way, patient and microsystem disruption is contained, anxiety, is reduced, and evidence-based care is applied in a timely manner as much as possible. The populations consists of critical care patients with NS, or MS diagnoses and in general are acutely ill. The critical care microsystem presented many opportunities to evaluate and trial the blood component administration process and by the very nature of its population was the most appropriate.

Successful transfusion therapy depends on providing each patient who needs a transfusion with the right blood component, at the right time, and for the right reason. To achieve the foregoing goal, each step in the process of blood transfusion, beginning with the physician who orders a transfusion to the actual administration of the ordered components, should be validated. Our project team consisted of nurses and non-nurses to bring the best knowledge and understanding to the process. We included risk management and patient safety, a project coordinator, patient care services administration, an inpatient unit manager, the inpatient quality liaison, front-line nursing staff, clinical laboratory representatives, and clinical laboratory scientists. The physicians were not represented here, but were kept in the loop of all work and findings.

During our first meetings we reviewed the current blood administration process to ensure all team members had the same level of understanding. In an effort to reduce blood component administration errors by 50% in the first quarter of 2016 (April 30, 2016) multiple objectives were put in place. Objectives for this project included meeting with frontline staff and key stakeholders in monthly meetings and bi-weekly huddles, the implementation of a checklist to be dispensed along with blood components to assist healthcare workers in completing all steps in the process, the implementation of a transfusion navigator into the electronic charting system to aid nurses in seamless navigation through all the steps in the process, real time audits of new process and workflow were conducted, and surveyed the new process and checklist amongst frontline staff.

Rationale

Nurses play a vital role in ensuring patient safety, which involves ongoing patient monitoring and the coordination of care. The nature of work carried out by nurses and the roles they perform provide them with various opportunities to reduce adverse events and to intercept healthcare errors before they happen. As Nurses are the primary providers in the inpatient setting who perform blood component administration, their skills and knowledge are crucial for them to administer blood components safely and efficiently. Therefore, it is essential nurses receive appropriate training in safe blood component administration practice.

By far the greatest risk to patients is human error; receiving the wrong blood component or one that is not compatible (Cottrell and Davidson, 2013). A fatality subsequent to a blood transfusion is a devastation one cannot quantify. Masken et. al, (2014) noted "Errors in the delivery of blood to patients are a considerable financial burden to the health care system and, as such, the financial cost of implementing new technology to curtail errors will be offset by savings in sample re-collection and blood product loss. The sheer magnitude of the number and type of errors that we have detected emphasize that it is time to divert some of our attention away from product safety alone to the entire transfusion process if we are to achieve transfusion safety for our patients" (p.66).

The power to protect patients from these types of risks lies in the hands of all staff members involved in the transfusion process, supported by the healthcare organizations within which they work, in the form of safe transfusion processes, sound policies, effective education, training and competency assessment, as well as the encouragement of a just culture for elevating errors into opportunities for improvement (Oldham, Sinclair, Hendry, 2009).

Methodology

The implementation of improved workflows and processes associated with preventing blood transfusion errors in the inpatient setting is associated with many complexities related to transforming these plans into action. The CNL, as an organizational and systems leader, understands these complexities and negates them by utilizing a change theory or model as a guide for project implementation. Change theories provide a framework for implementing, managing and evaluating change. Correspondingly, the absence of such framework or structure change is likely to fail (Mitchell, 2013). Lewin's theory of change, according to Stichler, "Is the most commonly recognized in nursing and health care and includes three levels of change, unfreeze, change, and refreeze" (2011). Lewin's three levels of change deals with, unfreezing when change is needed, moving when change is initiated, and refreezing when equilibrium is established which provided a structural framework for the expansion of ideas for designing a new workflow and process for blood component administration.

Implementing Lewin's unfreezing phase began with finding a method to make it possible for people to let go of the old way of doing things. Lewin explained unfreezing is fundamental to overcome resistance and conformity. The moving phase in the change theory involved a change of thoughts, feelings and behavior, which was both liberating and productive. Refreezing, the last phase, established change as a new standard operating procedure (Cummings, Bridgman, & Brown, 2016).

Unfreezing in this project included the assessment and examination of ordering, dispensing, administering, and monitoring of blood components and by doing so areas opportunities for improvement were illuminated. The moving phase for this project included planning and implementation, while the refreezing phase included a thorough evaluation of the

new process implementation and standardization. We determined, enhanced communication was needed and during the first phase implemented a checklist to be dispensed along with the blood component to assist healthcare workers in completing all steps in the process. Real time audits were then conducted by both nursing and lab, which consisted of the evaluation of dispensing, administering, and monitoring of blood components after administration, yielding quantitative data for analysis. Bi-weekly huddles were initiated with key stakeholders and frontline staff, to identify what was working well in the process and what needed to be changed. It was during these huddles that audit information was presented which stimulated five subsequent modifications of the process and workflow.

In the second phase of implementation a leveraging technology recommendation was made and a transfusion navigator was put into the electronic charting system to assist healthcare workers with the steps associated with blood component administration. The navigator now shows up as an icon or tab on the menu side of chart and should be used when patients have transfusion orders. This feature was expected to assist with maneuvering through the entire process from ordering, administration and documentation. Multiple PDSA's or small tests of change were needed as the checklist was revised five times to the current draft listed in the appendix A. To aid in sustainability we implemented a teach-back process for nurses to be initiated in the event of fallouts or errors. (Noted in appendix B). The Teach-Back Method is an evidence based communication confirmation method used to confirm competency. The cycle of reassessing and teaching back to confirm comprehension has been found to improve knowledge retention and improve outcomes. Teach back is not a test, it is indicative of how well you explain a concept or a procedure, a chance to check for understanding and, if necessary, re-teach the information ("AHRQ," 2016).

Data Source

During the FMEA several factors were explored to aid our team in the discovery of potential system failures related to blood component administration. First, we determined that blood component administration was indicated in 100 percent of the cases examined over a two-year period or eight quarters, and that they indeed met criteria for transfusion. Nursing documentation was reviewed to determine documentation compliance. After examining 155 units of blood products given, we found the overall compliance rate of nursing documentation was 96 percent revealing an opportunity for improvement and education. Actual cases reported to risk from January 1, 2015 to September 1, 2015 were reviewed. During this time period 143 cases were examined and revealed beneficial data for our workgroup. We found that policy and procedures were not followed 84 percent of the time or in 120 cases. Thereby illuminating a significant area of opportunity for education and or reinforcement of policies and procedures. Actual type and cross issues made up the second largest area of potential risk associated with blood component administration in the inpatient acute care setting. We found 44 cases which involved specimen handling and broke them down into two subcategories, nurse labeling and incorrect information on the actual blood component requisition. Nurse labeling issues accounted for 55 percent or 24 cases in which the labels were missing or incorrect, correct nurse initials were absent, and or the date and correct time were missing. Incorrect information on the actual requisition accounted for 45 percent or 20 cases. Actual administration errors yielded 27 percent or 40 cases.

To further aid in the FMEA process we audited a sample of inpatient units. One unit per shift per week was chosen to trace the blood component administration process from dispensing all the way through to patient administration. Any audited elements not met were then noted and

reported to Risk. The overall results of the audits revealed policy and procedures not followed in 32 percent of the cases while 18 percent of the cases were fallouts associated with incorrect patient verification procedure during the blood component administration process. The audit sample size accounted for 1percent of total transfusions for the inpatient acute care setting. Wasted or discarded blood components accounted for 20 percent or 29 cases reviewed while timely administration of blood components accounted for 7 percent or 10 cases. Patient outcomes associated with the above information, revealed 88 percent or 126 cases caused no injury, 8 percent or 11 cases were near misses, and 4 percent or 6 cases reported minor injury. The FMEA was the springboard for this project as it identified a need to improve safety practices and higher overall competence. EBP demonstrates addressing these issues perpetuate satisfaction of patients, families and care professionals overall, while ensuring patient safety at the point of care delivery (Nelson, Batalden, & Godfrey, 2007).

Literature Review

The articles included in this literature review deal with safety mechanisms and practices associated with blood component administration in the acute care hospital setting. A search of the CINHAL database was conducted using the PICO search strategy of blood component administration, errors, and acute care. Nine articles with dates that range from 2011 to 2016 were found. The underpinnings of these articles are the reasoning for their utilization in this review.

Cottrell & Davidson (2013) proved through a quantitative research study of 247 sites and 9,250 transfusions that there is a gap between national standards and current practice. Three standards were used, positive patient identification, patients with a wristband, and the final bedside check. As the results were largely positive a minority of patients were put at risk

because procedures were not followed. In order to close this gap the authors recommend hospital transfusion teams should consider using transfusion care pathways as part of their ongoing work to improve patient safety and standardize patient care.

Cottrell et al (2013) addressed the issue of wrong blood in tube during type and screening procedures. The objective was to identify interventions put in place and the effectiveness of said interventions to reduce wrong blood in tube incidences. The authors conducted a systematic review of 128 articles and identified 11 eligible articles for review. The overall findings concluded that all identified interventions reduced wrong blood in tube incidences. Five studies measured the effect of a single intervention, for example changing the blood sample labeling, weekly feedback, handwritten transfusion requests, and an electronic transfusion system. It was unclear which interventions were the most effective.

Cummings, Bridgman & Brown (2016) conceptualized Lewin's change theory through historical research. The authors of this article rather than relying upon secondary materials and sources went back to original sources to indeed validate the phases of Lewin's change theory. The belief is that over time the interpretations may have changed. In looking back, looking deeper and reading articles like Lewin 1947 rather than just citing them presented a worthwhile exercise and inspired new thinking.

Davis, Vincent & Murphy (2011) described the use of patient involvement as an intervention to reduce transfusion related errors. A systematic search of the medical literature was performed to assess empirical data associated with patient's attitudes toward participating in transfusion related behaviors. The small studies available suggest that patients have a limited understanding of transfusions. Although limited studies exist, the authors believe including

patients into the transfusion process adds another step for safety and can be done by utilizing national guidelines as a construct for such implementation.

Hijji et. al (2012) highlighted serious knowledge deficits, which have the potential to threaten patient safety and reduce the effectiveness of the transfusion. The authors investigated Jordanian nurses knowledge of blood transfusion through a descriptive study that involved a random sample of registered nurses from four public and university hospitals in Jordan. Utilizing a modified version of the Routine Blood Transfusion Knowledge Questionnaire (RBTKQ) with 43 sections, three hundred and five nurses (95.3%) completed, with a mean knowledge score of 51.3% (SD 7.3). The majority of nurses lacked knowledge with regards to patient preparation prior to blood bag collection, and the importance of proper patient identification and how to perform this. Mandatory ongoing blood transfusion training for Jordanian nurses is warranted urgently.

Isbister et al. (2011) reviewed 494 published articles and used the RAND/UCLA Appropriateness Method to determine the appropriateness of allogeneic red blood cell (RBC) transfusion based on its expected impact on outcomes of stable nonbleeding patients in 450 typical inpatient medical, surgical, or trauma scenarios. Panelists rated allogeneic RBC transfusion as appropriate in 53 of the scenarios (11.8%), inappropriate in 267 (59.3%), and uncertain in 130 (28.9%). Red blood cell transfusion was most often rated appropriate (81%) in scenarios featuring patients with hemoglobin (Hb) level 7.9 g/dL or less, associated comorbidities, and age older than 65 years.

Laws & Goudas (2013) discussed the need to increase awareness of the need for a system of surveillance of transfusions in the perioperative period. A systematic review of the literature was conducted to identify studies and reports of errors within the operating rooms. The search

identified 81 papers, and 13 papers were included in the review. The recommendations offer a better understanding of where, when and why transfusion errors might occur along the perioperative pathway.

Lippi & Plebani (2011) addressed the issues associated with specimen labeling errors as they are a serious problem in healthcare facilities. Patient specimen and laboratory testing identification errors comprise the majority of laboratory errors. The average number of specimens collected by registered nurses and the number of specimen labeling errors by registered nurses in the two adult intensive-care units in the six months before and the six months after the interventions were obtained via two instruments. The total error rate before the interventions was 1.31 per 1,000 specimens or 0.131%. The total error rate after the interventions was 0.139 per 1,000 specimens or 0.014%. Together, the two interventions, one-on-one education and removal of an electronic option that allowed registered nurses to bypass the barcode safety function, resulted in a 90% error reduction post- implementation.

Makens et.al (2014) provided a comprehensive analysis of transfusion errors occurring at a large teaching hospital and aimed to determine key errors that are threatening transfusion safety. Errors were prospectively identified from 2005 to 2010. Error data was coded on a secure online database and defined as any deviation from established standard operating procedures. Denominator data for volume of activity were used to calculate rates. Errors occurred at every point in the transfusion process, with the greatest potential risk of patient harm resulting from inappropriate ordering of blood products and errors in sample labeling.

Timeline

This project implementation consisted of two phases that took approximately 12 months from beginning to end. The second phase began with a PDSA and blood component checklist

implementation revision in November of 2015. Our project work group created a new policy in December 2015 to reflect the new blood component checklist as part of the administration process. In January 2016 the blood component checklist was revised to account for the fallouts that were still occurring in documentation. The transfusion navigator made its way into the EHR in early March 2016 requiring a final revision of the blood component checklist and a final PDSA. Lastly, we implemented a teach-back exemplar as a remediation tool for nurses to complete when fallouts or errors occur. Our plan is to continue to monitor the process and make changes as the data indicates.

Summary Report

In an effort to reduce blood component administration errors by 50% in the first quarter of 2016 (April 30, 2016) multiple objectives were put in place. Objectives for this project included meeting with frontline staff and key stakeholders in monthly meetings and bi-weekly huddles, the implementation of a checklist to be dispensed along with blood components to assist healthcare workers in completing all steps in the process, the implementation of a transfusion navigator into the electronic charting system to aid nurses in seamless navigation through all the steps in the process, real time audits of new process and workflow were conducted, and surveyed amongst frontline staff. The critical care microsystem presented many opportunities to evaluate and trial the blood component administration process as the populations consists of acutely ill patients.

Lewin's change theory provided a structural framework for the expansion of ideas for designing a new workflow and process associated with blood component administration. Lewin's theory deals with three levels of change, unfreezing when change is needed, moving when change is initiated, and refreezing when equilibrium is established. Unfreezing in this

project included the assessment and examination of ordering, dispensing, administering, and monitoring of blood components and by doing so areas opportunities for improvement were illuminated. The moving phase for this project included planning and implementation, while the refreezing phase included a thorough evaluation of the new process implementation and standardization.

A review of our quality and patient safety initiatives for an effective blood component administration process and workflow identified key failure modes within both the current and planned system. Initially, nursing documentation was reviewed to determine documentation compliance. After examining 155 units of blood products given, we found the overall compliance rate of nursing documentation was 96 percent revealing an opportunity for improvement and education.

Using inpatient provider and stakeholder input, a standard, succinct, and clinically relevant blood administration checklist was designed and implemented within the inpatient acute care hospital setting. Retrospective chart review was performed at 30 days, 60 days and 90 days to monitor uptake and outcomes. A standardized clinically relevant blood component administration checklist had high user uptake and sustainability and improved the overall compliance rate of nursing documentation. At 12 months after implementation and five revisions (PDSA to SDSA) of the checklist, blood component administration errors were down from 17.7% to 6.5%, which is congruent with effective safe processes set forth by the organization.

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Appendix A

Blood Transfusion Checklist

Date: _____ Unit No: _____ Room No.: _____ Shift: _____

- ☐ Did the RN verify the product with the physician's order prior to transfusing**?**
- ☐ Was Informed Consent verified prior to transfusing?
- ☐ W*a*s the patient asked to state their name if possible?(Verify2 Patient ID)
- ☐ Was the hospital armband attached to a patient extremity?
- ☐ Verify cross match with 2 RN's(RN/MD) by proper read back/verification of Bag label to Unit Tag, Form, and Hospital Band:
    - ☐ PATIENT NAME
    - ☐ MEDICAL RECORD
    - ☐ Patient ABORH
    - ☐ Unit ABORH
    - ☐ DONOR UNIT NUMBER
    - ☐ UNIT EXPERATION DATE
- ☐ Were baseline vital signs taken and documented **60 minutes prior** to transfusing?
- ☐ Are the "Transfusor" and "Verifier" documented in Health Connect?
- ☐ Verify in Health Connect the correct blood product is documented.
- ☐ Was the elapse time between "issue" and "Spike" less than 30 minutes?
- ☐ Transfusion start time documented (when the blood reaches the patient's infusion site)?
- ☐ Are vital signs and adverse reactions documented **15 minutes following** the start of the transfusion?
- ☐ Vital Signs documented **60 minutes following the start** of the transfusion?
- ☐ Transfusion stop time documented?
- ☐ Is the Time from dispense to completion four (4) hours or less*?*
- ☐ Volume infused documented matches bag of the correct blood product?
- ☐ Transfusion reaction documented upon completion?
- ☐ Vital Signs documented within **60 minutes following completion** of transfusion?

Date: _____ Unit No: _____ Room No.: _____ Shift: _____

- ☐ Did the RN verify the product with the physician's order prior to transfusing**?**
- ☐ Was Informed Consent verified prior to transfusing?
- ☐ W*a*s the patient asked to state their name if possible?(Verify2 Patient ID)
- ☐ Was the hospital armband attached to a patient extremity?
- ☐ Verify cross match with 2 RN's(RN/MD) by proper read back/verification of Bag label to Unit Tag, Form, and Hospital Band:
    - ☐ PATIENT NAME

- ☐ MEDICAL RECORD
- ☐ Patient ABORH
- ☐ Unit ABORH
- ☐ DONOR UNIT NUMBER
- ☐ UNIT EXPERATION DATE

☐ Were baseline vital signs taken and documented **60 minutes prior** to transfusing?

☐ Are the "Transfusor" and "Verifier" documented in Health Connect?

☐ Verify in Health Connect the correct blood product is documented.

☐ Was the elapse time between "issue" and "Spike" less than 30 minutes?

☐ Transfusion start time documented (when the blood reaches the patient's infusion site)?

☐ Are vital signs and adverse reactions documented **15 minutes following** the start of the transfusion?

☐ Vital Signs documented **60 minutes following the start** of the transfusion?

☐ Transfusion stop time documented?

☐ Is the Time from dispense to completion four (4) hours or less*?*

☐ Volume infused documented matches bag of the correct blood product?

☐ Transfusion reaction documented upon completion?

☐ Vital Signs documented within **60 minutes following completion** of transfusion?

Appendix B

BLOOD PRODUCT ADMINISTRATION TEACH BACK METHOD

What is it?

- An evidence based method of competency
- The Teach-Back Method, also called the "show-me" method, is a communication confirmation method used to confirm comprehension.
- The cycle of reassessing and teaching back to confirm comprehension has been found to improve knowledge retention and improved outcome.
- Teach back is not a test, it is indicative of how well you explained a concept or a procedure.
- A chance to check for understanding and, if necessary, re-teach the information.

Instructions:

- Staff meets with manager and discusses ideas for, a topic, procedure or equipment to perform a teach- back. (In this case, should be related to Blood Transfusion)
- Once a topic has been identified, staff develops a plan to provide instruction to a team of no less than 5 coworkers including a teach- back demonstration.
- Staff demonstrates how they will undertake a recommended procedure or intervention.

Plan of approach

- Audience for teach back (e.g. other staff or demonstrating technique or procedure to Manager)
- May use handouts to reinforce teaching
- May provide the teach back at staff meetings or team meetings

Track progress

- Manager assesses results of teach back method in ____ weeks.
- Completion Of Teach Back method should be documented (date done, and names of audience)

Appendix C

Blood Product Administration Exemplar

Instructions:

- Write and submit an exemplar of your clinical practice experiences.
- This exemplar will be initiated within ___ days after successful completion of the on line Blood Transfusion module.
- The exemplar will be completed and returned to your unit leader ___ days.
- Upon completion and submission of the exemplar, your unit leader is the only person who will review the completed document and may ask some questions in regards to the document.
- Your unit leadership, clinical education, quality representative and any other employee may serve as a resource to help develop and complete the exemplar

Purpose

The purpose of the exemplar is to help provide understanding how the work involved in developing it has an added value to your professional nursing practice and the process of developing the exemplar is also a useful to provide self-reflection on the changing practices of the Nurse's role.

What constitutes an Exemplar?

- A situation in which you feel your intervention really made a difference in patient outcomes either directly (with patient or family member) or indirectly (by helping other staff members).
- A clinical situation that stands out as the quintessence of nursing:
- A clinical situation: that taught you something new, changed your practice, opened new ways of helping or new lines of inquiry, incident that went unusually well or where there was a breakdown.
- Focused on clinical work, aspects, domain of nursing practice examples include:
    - Clinical judgment, wisdom, thinking, & reasoning.
    - Therapeutic relationships; caring practice
    - Understanding of a situation; ability to "see" a problem.
    - Actions in a situation; performance, sense of responsibility.
    - Response to a changing situation, anticipatory skills.
    - Engagement with a patient/family; skills of involvement
    - Advocacy; response to diversity
    - Collaboration; teamwork
    - Clinical Inquiry; innovation

When Developing Exemplars

- Provide a brief background or history of patient exclude any patient health information (PHI).

- Write a story bridging the clinical nursing practice examples with your own nursing experience and what outcomes resulted.
- Share your own experiences as a professional nurse, family member or patient.