

**IMPLEMENTING ANTEPARTUM STANDARDS OF NURSING PRACTICE  
WITHIN THE FAMILY CARE UNIT**

by

© Jenny Burton – Wilson

A Practicum Report submitted to the

School of Graduate Studies

in partial fulfillment of the requirements for the degree of

**Master of Nursing**

**School of Nursing**

Memorial University of Newfoundland

**September 2014**

St John's

Newfoundland and Labrador

**Abstract**

**Background and Purpose:** The purpose was to implement standards of nursing practice for antepartum patients admitted to a Family Care Unit, where no such standards were in place.

**Methods:** Four methods were used to achieve the practicum objectives: 1) a literature review was conducted to identify barriers and facilitating factors that may affect the implementation of change within the hospital setting; 2) an antepartum standards of nursing practice policy and procedure (P&P) was developed based on evidence-based literature; 3) consultations were conducted with administrative leaders and nursing staff to gather feedback on the feasibility of the implementation plan and the proposed antepartum standards of nursing practice P&P; and 4) a draft implementation plan was developed based on the literature review and finalized following the consultations.

**Results:** The P&P was supported by the administrative leaders and nursing staff, and submitted to the organization for approval. They also supported the implementation plan, and provided suggestions for improving it and strengthening education around the P&P. Implementation of the standards of practice is now ready to proceed.

**Conclusion:** This practicum project was used to establish a standard of nursing practice for antepartum patients who are admitted to the Family Care Unit. Its successful implementation should help reduce variations in practice and provide direction for clinical decision-making to improve patient outcomes.

**Table of Contents**

Introduction .....1

Practicum Objectives .....2

Overview of Methods .....2

Literature Review .....3

Policy and Procedure .....11

Consultations .....12

Implementation Plan .....18

Advanced Nursing Practice Competencies .....20

Conclusion .....22

References .....23

    Appendix A: Literature Review .....25

    Appendix B: Literature Summary Tables .....47

    Appendix C: Factors and Strategies That May Affect Implementation .....62

    Appendix D: Policy and Procedure .....67

    Appendix E: Consultation Report .....79

    Appendix F: Implementation Plan .....94

## **Introduction**

The successful implementation of standards of nursing practice reduces variations in practice and provides direction for clinical decision-making to improve patient safety and improve patient outcomes. Standards of practice serve as a guide to the professional knowledge, skill, and judgment needed to practice nursing safely (Gilbert, 2011). Unfortunately, evidence-based research has been slow to influence standards of practice within many hospitals across the world. Currently in healthcare organizations across the world, challenges have surfaced concerning how to assure successful implementation of evidence-based standards of practice.

Bakersfield Memorial Hospital is a 400 bed tertiary hospital located in the downtown district of Bakersfield, California. The Family Care Unit at Bakersfield Memorial Hospital primarily provides care to postpartum mothers and newborns, however, it is common for antepartum patients to be admitted to this unit as well. In a meeting with two nursing administrators, they expressed similar concerns that many nurses were not knowledgeable in the assessment and standards of practice for the antepartum patient. Upon investigation, it was identified that there was no policy or guidelines that govern the standards of nursing practice for antepartum patients admitted to the Family Care Unit.

The establishment of nursing practice standards is essential for the nursing profession. Nursing practice standards represent acceptable requirements for determining the quality of nursing care a patient receives. The purpose of this practicum was to

## Implementing Standards of Nursing Practice Within a Family Care Unit

establish a standard of nursing practice for antepartum patients who are admitted to the Family Care Unit at Bakersfield Memorial Hospital. The implementation of these standards of practice will expand the knowledge of Family Care Unit nurses in caring for antepartum patients and improve recognition of maternal and fetal complications in the antepartum period.

### **Practicum Objectives**

The practicum objectives were to:

1. Develop a policy and procedure to guide standards of practice for antepartum patients.
2. Assess factors which may have an impact on the implementation of antepartum standards of practice within the Family Care Unit.
3. Develop an implementation plan based on a review of the literature and consultation with colleagues and staff.
4. Develop an education plan to be used to educate Family Care Unit nurses in caring for antepartum patients as per the standards of nursing practice.
5. Demonstrate advanced nursing practice competencies.

### **Overview of Methods**

There were four main methods used to achieve the practicum objectives. These were the review of the literature, development of the policy and procedure, consultations with key stakeholders, and development of the implementation plan. The literature was

## Implementing Standards of Nursing Practice Within a Family Care Unit

reviewed to identify factors that may affect implementation of standards of practice into a Family Care Unit setting and select a guiding framework for implementation. An antepartum policy and procedure was developed based on evidence-based literature and was based on the “*Manual of High Risk Pregnancy and Delivery*” written by Elizabeth Gilbert in 2011. Antepartum conditions included in policy include first trimester bleeding, pre-term labor, pre-mature rupture of membranes, and pre-eclampsia. Consultations were conducted with key administrative leaders and nurses and were focused on the implementation plan, policy and procedure, and factors identified in the literature review. A draft implementation plan was developed based on the literature review and it was finalized following the consultations.

### **Literature Review**

The purpose of the literature review was to identify relevant implementation strategies as ways to minimize barriers that may be encountered during the implementation of new antepartum standards of practice within the Family Care Unit. Six themes emerged from the literature review and were placed into one of two categories: organizational factor or personal factor. Personal factors identified in the literature review that may affect implementation were workload concerns, understanding the change, and negative expectations. Organizational factors identified were unit culture, lack of involvement in change, and leadership support. The complete literature review and literature summary tables can be found in Appendix A and Appendix B, respectively. A summary of the factors and strategies that can affect successful implementation can be found in Appendix C.

### **Literature Review Methods**

The literature search process was conducted from September to November 2013 by searching multiple electronic academic literature databases. The databases searched were CINAHL, PubMed, and Cochrane using the search terms “practice change in nursing,” “implementing practice change,” “implementing clinical practice guidelines,” “factors affecting practice change,” “implementation of standards of care,” “barriers to practice change,” and “change in practice.” Mesh terms included “standards of practice,” “standards of care,” and “clinical practice guidelines.” The articles were downloaded via the Memorial University library and articles that were not English, published more than 5 years ago, or did not address the practicum topic and the hospital setting were eliminated.

### **Literature Review Results: Personal Factors**

Personal factors that contribute to implementing evidence-based changes into practice include workload concern, negative expectations, and lack of involvement in change.

#### **Workload concerns.**

Practice changes that result in a significant impact on daily routine and workload may be seen as an unwanted change by some nurses and may become a significant factor in implementing practice changes (Mills, Fields, & Cant, 2011). These authors found that barriers to change practice included nurses’ perception that they did not have enough time at work for the change, staffing shortages, and nurses lacked authority in the work place to change practice. Hauck, Winsett, and Kuric (2012) found that many nurses

perceive that they have insufficient time in the workplace to read, search the databases, appraise evidence, and implement new ideas. Mills et al. (2011) discussed the reasons why, in order to increase the likelihood that a change is successful, it is important for the organizational leaders to assess, with the nursing staff, the impact that the practice change will have on nurses' daily routine and workload prior to implementing the change.

**Negative expectations.**

Oftentimes, the implementation of a change in practice is not successful. Cummings et al. (2009) found that a factor that may affect the implementation of a change in practice is that the staff may not believe that a new change will stick as changes in the past have failed (Cummings et al., 2009). According to these researchers, the leader needs to communicate positive expectations of the change and demonstrate commitment to change in order to overcome negative expectations surrounding the change.

**Lack of involvement in change.**

If nurses do not have the opportunity to ask questions and express concerns, it will be difficult for leaders to implement research into practice. Nursing engagement and effective communication are significant factors to consider when implementing changes in practice (Dammeyer, Mapili, Palleschi, 2012 and Malone, 2004).

According to the literature reviewed, a lack of involvement in the change makes it very difficult to implement research into practice. In several studies, the relationship between nurses and their leader was identified as a key strategy to involving nurses in the



change (Cummings et al., 2010). In a study by Portoghese, Galletta, Battistelli, Saniani, Penna, and Allegrini (2012), the researchers found that when nurses perceived a high quality relationship with their supervisor and high quality communication was provided related to the change, they had greater opportunity to participate, develop positive expectations of the change, and demonstrate a higher level of commitment to change.

### **Literature Review Results: Organizational Factors**

The literature reviewed acknowledged several organizational factors that have a significant influence on the implementation of evidence-based standards into practice: organizational/unit culture, understanding of the change, and leadership support.

#### **Organizational culture.**

Organizational culture refers to the system of shared beliefs among employees based on common characteristics (Marchionni & Ritchie, 2008). Malone (2004) identified that a strong organizational culture consists of clear roles, clear decision making, valued staff, and leaders acting as change agents to guide performance. Evidence has shown that certain organizational cultures are a strong predictor of sustained change in organizations. The literature review has demonstrated that organizational culture is strongly influenced by those in leadership positions (Marchionni & Ritchie, 2008; Gifford, Davies, & Edwards, 2006). Cummings et al. (2009) concluded in their review of 53 studies that relationship or people centered leadership practices contribute to improving outcomes for patients, productivity, and culture of the healthcare organization.

**Understanding the change.**

The goal of education in implementing practice changes is to share information that supports the evidence-based practice change, in order to focus staff nurses on the problem of interest and help them to understand the change. Portoghese et al. (2012) indicated that information is vital in shaping nurses' expectations and providing the foundation for developing attitudes (positive and negative) toward change. Lusardi (2012) explained that when leaders fail to fully educate staff nurses on the rationale for practice changes, communication will be disjointed, and compliance may be challenging.

Several articles reviewed discussed the need to re-educate staff nurses using multiple methods; education is not a one-time occurrence. Several articles reviewed discussed the need to re-educate staff nurses using multiple methods. Some studies reported that the problem was not clearly defined and it was uncertain if staff and leaders were discussing the same issue (Dammeyer et al., 2012; Lusardi, 2012). Dammeyer et al. (2012) concluded that a strategy to engage staff in the implementation of change is to make teaching more personal. Utilization of toolkits and peer mentoring groups to advise other nurses regarding the implementation of research findings are strategies being widely used (Mills et al, 2011).

**Leadership support.**

According to Portoghese et al. (2012), if the organization is the setting of change and employees are the vectors for change, then leaders, managers and supervisors are the catalysts of change. It is well identified in the literature review that leaders are considered

the first source of communication in hierarchical organizations. Leaders play an important role in influencing nurses' understanding of changes, and thereby influencing nurses' readiness to commit to change. Lusardi (2012) suggested that leaders must consider an organization's or department's commitment to change because the probability for acceptance of change is higher if nurses and leaders, who are involved, perceive that a problem exists and that change is needed.

Cummings et al. (2010) concluded from six studies that higher satisfaction with the leader was found when leadership styles were charismatic, resonant, and transformational. In those six studies, reduced productivity was a result of management by exception, transactional, and laissez-faire leadership styles. In a study by Gifford et al (2006), the researchers emphasized the need for leaders to be accessible and visible. The study found that in nine organizations where change was un-sustained, a lack of leadership presence and support was identified by nurses as a contributing factor. The researchers found that there was a lack of staff education, and policies did not reflect the clinical practice guidelines. In contrast, leaders in sustained organizations were known for being role models, monitored clinical outcomes, and supported the need for clinical champions. It can be concluded from the literature review that when leaders communicate and involve nurses in change processes, the nurses became more engaged and have an increased sense of control over changing their practice (Dammeyer et al., 2012; Portoghese et al., 2012).

### **Conceptual/Theoretical Framework**

Review of the literature confirmed that there is not one core model or framework to guide the implementation of change in nursing practice nor is there any clear-cut basis for suggesting which specific interventions for which barriers to change are most effective. According to the literature reviewed, implementation strategies need to be specific to the change setting as no single approach will have universal applicability.

Several models and frameworks identified in the literature review were not appropriate to base the practicum project upon. Models such as the Johns Hopkins Model, Rossworm and Larrabee Model, and Iowa Model are specific to the process of gathering evidence to determine the change in practice. The Johns Hopkins Model does not focus on the implementation process but the identification of an evidence-based practice question and organizing a research team. The Rossworm and Larrabee Model guides clinicians through six steps of evidence-based practice but does not focus on the implementation process. The Iowa model encourages staff nurses to identify practice questions and develop a team based model to develop, implement, and evaluate change.

A large number of studies focused upon implementing evidence-based practice changes used the Promoting Action on Research Implementation in Health Services (PARIHS) framework (Malone, 2004; Gozdzik, 2013). In an article by Malone (2004), the author outlines and describes components of the PARIHS framework. The PARIHS framework is specific to implementing change and considers three elements: evidence, context, and facilitation. According to the PARIHS framework, the researcher must be

clear about the nature of the evidence being used, the quality of context (culture and leadership), and the amount of facilitation needed to ensure the adoption of the new change in practice. In the PARIHS framework, facilitators are individuals with the necessary skills, and knowledge to help individuals, teams, and organizations translate evidence into practice.

Although the PARIHS framework provides a very broad conceptualization of how evidence-based research is used in nursing practice, the concept of leadership remains underdeveloped and primarily theoretical in this framework. In addition, the PARIHS framework does not take into account staffing resources and methods of information dissemination. The literature reviewed did identify several strengths of the PARIHS framework such as its flexibility in application and that concept analyses have been conducted for each element of the framework.

### **Literature Review Conclusion**

The review of the literature revealed that there are numerous personal and organizational factors that may affect the implementation of antepartum standards of practice. The literature reviewed also identified potential strategies that could be used to address the issues. A summary of the factors and strategies that can affect successful implementation can be found in Appendix C.

It was concluded at the end of the literature reviewed that implementation would not be guided by a model but based upon the organizational and personal factors that affect the implementation of standards of nursing into practice. Personal factors that

contribute to implementing evidence based changes into practice include workload concern, negative expectations, and lack of involvement in change. The organizational factors identified were related to organizational/ unit culture, understanding of the change, and leadership support.

### **Policy and Procedure**

An antepartum policy and procedure was needed to establish written guidelines concerning the assessment and nursing care of antepartum patients. The “*Manual of High Risk Pregnancy and Delivery*” written by Elizabeth Gilbert in 2011 was the primary resource used in the development of the antepartum standards of practice policy. The author used Cochrane Reviews, a database of systematic reviews, and evidence-based clinical guidelines from key organizations such as Agency for Healthcare Research and Quality (AHRQ), National Guideline Clearinghouse (NGC), Institute for Clinical Systems Improvement (ICSI), and Society of Obstetricians and Gynecologists of Canada (SOGC). In addition, references from professional organizations such as ACOG were used to develop standards of care for high risk pregnancies and deliveries. The policy provides guidelines for the assessment, management, documentation, and communication of antepartum patients with third trimester bleeding, pre-term labor, pre-mature rupture of membranes, and pre-eclampsia/eclampsia. A draft of the policy was provided to all consultation participants prior to the consultation interviews. No modifications to the policy were suggested. The complete policy and procedure can be found in Appendix D.

## **Consultations**

Consultations were conducted with administrative leaders at Bakersfield Memorial Hospital to ensure that the organization agreed with the proposed standards of care and stakeholders had the opportunity to make any revisions to the policy and implementation plan. The consultations were focused on the implementation plan, policy and procedure, and factors identified in the literature review. The introduction to the consultation and questions that were used to guide each consultations can be found in the consultation report in Appendix E.

### **Consultation Methods**

In order to ensure that the most current evidenced-based practices were being adopted, consultations were conducted with the following administrative leaders to ensure the organization agreed with the proposed standards of care and had the opportunity to make any revisions to the policy and implementation plan.

- a) Chief Medical Officer
- b) Family Care Manager
- c) Perinatal Practice Specialist
- d) Obstetrical Medical Director

Four Family Care Unit staff nurses, two senior and two junior nurses, were consulted to provide feedback on the policy and procedure and implementation plan related to implementation of antepartum standards of practice into the Family Care Unit. These nurses were identified by the department manager as being influential leaders and change agents for the Family Care Unit in previous change management initiatives.

## Implementing Standards of Nursing Practice Within a Family Care Unit

All consultations, except one, were conducted in a private office. Due to scheduling conflicts, the consultation for the Obstetrical Medical Director was completed via telephone. The average duration of each consultation was 20 minutes. All data were kept in a secured office and the identity of each consultation participant was protected.

Specific goals for leadership consultations were:

1. Seek guidance on navigating the factors that affect implementation of antepartum standards into practice in order to finalize the implementation plan.
2. Seek feedback on the written procedures and approval on the antepartum standard of practice policy and procedure prior to presenting the policy for approval at the Policy and Procedure Committee.
3. Obtain engagement and support of leadership in implementing standards of practice into a Family Care Unit.

Specific goals for the staff consultations were:

1. Seek feedback from staff concerning their perceived need for an antepartum policy and procedure.
2. Seek feedback on perceived factors that will affect implementation of antepartum standards of practice into the Family Care Unit.
3. Seek feedback on strategies that would best facilitate implementation and finalize the implementation plan and timeline.
4. Seek feedback on leadership strategies to assist with translating antepartum standards into practice.



**Consultation Findings: Policy and Procedure**

No changes to the policy and procedure were suggested during the consultation interviews with both the administrative and nursing groups. One administrator felt that “this policy should have been in place years ago,” and one nurse stated “this policy will be good for our nurses and patients.” This was the general consensus amongst all the administrator and staff nurse consultation interviews. The policy was submitted to the Policy and Procedure Committee, was approved in April 2014, and can be found in Appendix D.

**Consultation Findings: The Need for Antepartum Standards of Practice**

The administration and nursing staff supported and understood the need to implement antepartum standards of nursing practice in the Family Care Unit. One administrator verbalized that in her opinion the Family Care Unit nurses lacked knowledge in how to assess an antepartum patient and what signs of deterioration in condition to observe for. Another administrator confirmed that many Family Care Unit nurses lacked knowledge concerning antepartum assessment and documentation standards and stated “I have only been in this role for a short time but I can tell you that the nurses are practicing very differently when it comes to antepartum patients and this is a potential safety risk for patients and legal risk to our hospital.” This administrator verbalized that there is no formalized education on how to care for antepartum patients and nurses rely on what is taught to them by another nurse. One nurse was very supportive of implementing antepartum standards of practice in the Family Care Unit and felt that written standards of practice would be helpful for preceptors to use when they

orient new nurses to the Family Care Unit. Another nurse was very passionate during the consultation and stated “often these patients can deteriorate and many nurses have a lack of training in what to assess and document.”

### **Consultation Findings: Engagement Strategies**

The staff nurse group was asked their opinion on the best way to introduce new antepartum standards of practice to the nursing staff. All consultation interviews identified that the monthly staff meeting is a good method of communicating new information to the staff. Two out of four nurses felt that nurses will abide by the new practice standards as long as they know the rationale for the change. One nurse identified on-line education through Healthstream as a non-intrusive method of introducing antepartum practice standards to the nursing staff. Another nurse suggested putting the policy and education PowerPoint on Healthstream for all nurses to read and attest to or facilitating a web-ex educational session. These strategies of communication were seen as non-intrusive and accommodating to the nurses’ personal lives. Another nurse suggested developing a policy reference tool that is posted in the department with the documentation criteria that are listed in the policy. The rationale for this tool is to facilitate easy reference to the policy when nurses are completing their documentation.

The administrative group was asked what past strategies have been effective in gaining physician and nursing support with implementing new standards of practice within family care or other departments. Two administrators felt that it was important for leaders to communicate with the nursing and physician staff about the upcoming practice change several weeks in advance so the staff have time to ask questions and hear the

rationale for changing their practice. All staff nurse consultation interviews verified that staff engagement is fostered by the leader simply talking about the practice change, being visible, and communicating with staff about the rationale for antepartum standards of practice change.

**Consultation Findings: Personal Facilitators vs. Personal Barriers**

Both the administrative and staff nurse consultation groups were asked what they felt were personal and organizational factors that could be barriers or facilitators to implementing antepartum standards of practice in the Family Care Unit. The definitions of personal and organizational barriers had to be reviewed with the two junior staff nurses prior to being able to answer the consultation questions. Both barriers and facilitators were identified relating to the person and the organization.

A personal facilitator identified was the Family Care Unit nurses' ability and willingness to change their own practice. Two administrators believed that nurse champions would be influential in changing the practice of other nurses within the department. Another administrator felt that the obstetrical physicians would be facilitators and drivers for antepartum standards of nursing practice and believed that the obstetrical physicians "will help enforce the policy standards because this area of nursing has always been an area of concern for the physicians."

Four administrators felt that the willingness of the staff to change their practice and abide by the policy was a personal barrier to implementing antepartum standards of practice. A personal barrier identified by two nurses was their ability to recall the documentation criteria listed in the policy. One nurse suggested that a documentation tool

would be a useful tool for nurses' work areas and stated "there is a lot to remember to chart for each antepartum condition based on this policy." This suggestion has been added as a component of the implementation plan found in Appendix F.

**Consultation Findings: Organizational Facilitators vs. Organizational Barriers**

One administrator felt that an organizational facilitator to implementing antepartum standards of practice is the organization itself. This administrator felt the organization was very supportive of perinatal safety initiatives and in the past year has adopted five of the national perinatal safety goals. Another administrator felt that the manager was an organizational facilitator to change and needed to hold the nurses accountable for following the antepartum standards of practice policy once it is implemented. Two nurses felt that the organization could be a facilitator of the change by being flexible with the nurses' schedule to attend in-services and allow the nurses to complete the education before and after work if this is what the nurse requests.

Two nurses felt that an organizational barrier to change was the nurses' work schedules. All of the nurses who work in the Family Care Unit work twelve hour shifts and are currently not allowed to attend meetings before or after their shift because the hospital does not pay overtime. One nurse felt that a lot of nurses do not like having come in on their days off and having to pay for child care.

**Consultations: Conclusion**

The consultation interviews provided insight into the factors that may affect the implementation and the feasibility of the implementation plan. The implementation plan was revised as a result of the feedback encountered during the consultation interviews

## Implementing Standards of Nursing Practice Within a Family Care Unit

with administrators and nurses. The consultation interviews identified communication and knowledge barriers between nurses in the Family Care Unit and Labor and Delivery Unit. A detailed consultation report can be viewed in Appendix H.

### **Implementation Plan**

The implementation of standards of practice for antepartum patients is going to be a significant practice change for Family Care Unit nurses. The successful implementation of antepartum standards of practice will reduce inappropriate variation in practice, and provide a set of instructions for clinical decision-making to improve patient safety and improve maternal/fetal outcomes. To prepare for implementation of antepartum standards of practice, it was necessary to: 1) finalize the policy and procedure, 2) get support from administrative leaders and Family Care Unit nursing staff, and 3) develop the education plan. The implementation plan can be found in Appendix E.

### **Finalize Policy and Procedure**

The policy was finalized upon completion of the consultations with administrative leaders and submitted to both the Policy and Procedure Committee and the Obstetrical Supervisory Committee for approval. The policy was approved by both committees in April 2014.

### **Obtain Support from Administrative Leaders and Nursing Staff**

Consultations were completed with administrative leaders and nursing staff to involve them in the change and implementation process from the beginning. Specific factors to

## Implementing Standards of Nursing Practice Within a Family Care Unit

facilitate implementation were identified in the consultation sessions and any concerns with the implementation plan were addressed immediately in order to sustain support and change in practice. Support for the implementation of antepartum standards of practice was given by all administrative leaders and Family Care Unit Nurses who were consulted.

### **Develop the Education Plan**

Multiple methods of communication will be used to assist staff nurses in recalling the standards of practice, applying these standards at the bedside, and demonstrating them in their nursing documentation. The consultation interviews with administrative leaders and nursing staff identified that:

- a) It was important to offer multiple educational in-services during day and evening shifts to reach 100% of staff.
- b) To increase compliance with the new standards of practice it was important to educate both Family Care Unit and Labor and Delivery Unit nurses.
- c) The implementation date should be chosen before the summer months due to an increase in antepartum volume during the summer months.

The following education plan was developed to ensure that all Family Care Unit nurses and Labor and Delivery Unit Nurses are educated in caring for antepartum patients as per the standards of practice:

## Implementing Standards of Nursing Practice Within a Family Care Unit

- a. Each staff nurse will be required to complete a pre-test and policy attestation on Healthstream prior to attending the educational in-service.
- b. Each staff nurse will be required to attend an in-person in-service which includes a PowerPoint presentation, case study, and post-test quiz.
- c. There will be assigned antepartum clinical champions.
- d. To assist staff nurses in recalling documentation standards, an antepartum documentation form will be developed for both units.
- e. The policy will be located in the nursing work area for immediate reference.

### **Advanced Nursing Practice Competencies**

Advanced Nursing Practice (ANP) competencies assist in defining advanced nursing practice, increase consistency in role definition, and provide standards for competency development (Canadian Nurses Association, 2008). Due to the wide range of specialties in the nursing profession, these competencies reflect graduate nurses' practice across all specialties, populations, and settings. Through this practicum I was able to demonstrate the ANP competencies of research and leadership, as illustrated in the following sections.

#### **Research Skills**

Research competencies as defined by Canadian Nurses Association (2008) are demonstrated by identifying, conducting, and supporting research that enhances nursing

practice and improves the organization as the primary investigator or collaborator. This advanced practice competency was demonstrated as a part of this practicum by identifying the knowledge gap in the Family Care Unit concerning antepartum practice standards and facilitating the change in practice as the primary investigator. A systematic process was used to conduct the evidence-based literature review and develop the policy, consultation plan, and implementation plan. As the project lead, I evaluated current practice at the organizational level and conducted consultation interviews with administrative and nursing staff using research methodology in order to seek feedback and obtain buy-in on the proposed standards of practice.

### **Leadership**

Leadership competencies as defined by the Canadian Nurses Association (2008) are demonstrated by advocating for patients and families in relation to their care, identifying learning needs of nurses and other professionals, and mentoring members of the healthcare team. This advanced practice competency was demonstrated as a part of this practicum by advocating for the implementation of standards of care for antepartum patients and collaborating with administrative leaders and nurses to initiate the change in practice. Leadership competencies were demonstrated by working with administrative and nursing staff to revise the policy and implementation plan based on feedback from the consultation interviews. The consultations with the administrative and nursing staff displayed a leadership role by being an advocate for patient safety and engaging the support of others. Attributes of a nurse leader that were demonstrated are expert communications skills, commitment to patient safety, and critical thinking skills.



### **Conclusion**

In summary, this practicum focused on the development of an evidence-based policy and procedure for antepartum care, and a locally relevant plan for implementation. The policy and procedure was approved by the hospital as the standard of care and support was obtained from both administrative and nursing leaders through consultations. Upon conclusion of the practicum project, a focused strategic implementation plan was developed to mitigate and support the factors involved in implementing standards of nursing practice with the Family Care Unit.

It is recommended that other leaders, staff, or organizations who may use this work understand that preparing for the implementation of evidence-based research into practice is a multifaceted process and can take years to sustain change in practice. It is through evidence-based research, consulting, and collaborative discussion with key stakeholders that the likelihood of successful implementation will increase.

## References

Cummings, G., MacGregor, T., Davey, M., Lee, H., Wong, C., Lo, E., Muise, M., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385

Canadian Nurses Association. (2008). *Advanced Nursing Practice: A national framework*. Ottawa: Author.

Dammeyer, J., Mapili, C., Palleschi, T. et al. (2012). Nurse-Led Change: A Statewide Multidisciplinary Collaboration Targeting Intensive Care Unit Delirium. *Critical Care Nursing*, 35 (1), 2–14.

Gifford, W., Davies, B., Edwards, N., & Graham, I. (2006). Leadership strategies to influence the use of clinical practice guidelines. *Nursing Leadership*, 19 (4), 74 – 86.

Gilbert, E. (2011). *Manual of High Risk Pregnancy and Delivery*. 5<sup>th</sup> Ed. Mosby, St. Louis, MO.

Gozdzik, A. (2013). Applying the PARiHS framework in a knowledge dissemination initiative. *Canadian Association of Nephrology Nurses and Technologists Journal*, 23(2), 48-50.

Hauck, S., Winsett, R., & Kuric, J. (2012). Leadership facilitation strategies to establish evidence-based practice in an acute care hospital. *Advanced Journal of Nursing*, 664 – 675.

## Implementing Standards of Nursing Practice Within a Family Care Unit

Lusardi, P. (2012). So you want to change practice: recognizing practice issues and channeling those ideas. *Critical Care Nurse*, 32 (2), 55-66.

Malone, J. (2004). The PARIHS framework – a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care and Quality*, 19(4), 297 – 304.

Marchionni, C., & Ritchie, J. (2008). Organizational factors that support the implementation of a nursing best practice guideline. *Journal of Nursing Management*, 16, 266 – 274.

Mills, J., Feld, J., & Cant, R. (2011). Factors affecting evidence translation for general practice nurses. *International Journal of Nursing Practice*, 17, 455–463.

Portoghese, I., Galletta, M., Battistelli, A., Saiani, L., Penna, M. P., & Allegrini. (2012). Change-related expectations and commitment to change of nurses: the role of leadership and communication. *Journal of Nursing Management*, 20, 582–591.

## **Appendix A: Literature Review**

### **Introduction**

The successful implementation of standards of nursing practice reduces variations in practice and provides direction for clinical decision-making to improve patient safety and improve patient outcomes. Standards of practice serve as a guide to the professional knowledge, skill, and judgment needed to practice nursing safely (Gilbert, 2011). Unfortunately, evidence-based research has been slow to influence standards of practice within many hospitals across the world. Currently in healthcare organizations across the world, challenges have surfaced concerning how to ensure successful implementation of evidence-based standards of practice. This has been confirmed in numerous studies which have consistently highlighted the factors and/or barriers to nurses adopting evidence-based research changes in practice. Factors that influence the implementation of standards of practice are known to exist on the personal and organizational level.

The purpose of this literature review was to identify factors that influence the implementation of standards of practice within a hospital setting. The information gathered from this literature review provided insight into the factors that affect the implementation of evidence-based practice changes. This resulted in the ability to appropriately target implementation strategies, and minimize barriers that may be encountered during the implementation of new antepartum standards of practice within the Family Care Unit. For too many, evidence-based practices are new and require additional training and skills that have to be learned and translated into practice on the job. Information learned from the literature review provided guidance on how to

implement practice changes to align current nursing practice with evidence-based practices.

### **Literature Search Methods**

The literature search process was conducted from September to November 2013 by searching multiple electronic academic literature databases. The databases searched were CINAHL, PubMed, and Cochrane using the search terms “practice change in nursing,” “implementing practice change,” “implementing clinical practice guidelines,” “factors affecting practice change,” “implementation of standards of care,” “barriers to practice change,” and “change in practice.” Mesh terms included “standards of practice,” “standards of care,” and “clinical practice guidelines.” The articles were downloaded via the Memorial University library and articles that were not English, published more than 5 years ago, or did not address the practicum topic and the hospital setting were eliminated.

### **Factors that Influence Implementation**

The literature review clearly identified multiple personal and organizational factors that affect implementation of nursing standards of practice. A significant number of research articles did suggest that the nursing profession has not yet evolved to the point where nurses regularly engage in translating evidence-based knowledge into practice. Several personal and organizational factors were repeatedly identified as having a significant influence on the implementation of evidence-based practice standards into practice. A literature summary table that summarizes details of key studies can be found

in Appendix B; authors of the studies included in the table are highlighted in bold in the text.

### **Organizational Context**

In the literature reviewed, there was inconsistency in regards to the definition of the term organizational context. Godzick (2013) and **Marchionni and Ritchie** (2008) referred to context as the setting where change is going to be implemented. Context sub-variables are culture, leadership, and resources. According to Portoghese, Galletta, Battistelli, Saniani, Penna, and Allegrini (2012), if the organization is the setting of change and employees are the vectors for change, then leaders, managers and supervisors are the catalysts of change. Malone (2004) identified that a strong organizational context consists of clear roles, clear decision making, valued staff, and leaders acting as change agents to guide performance.

#### **Organizational culture.**

There were very few studies found that demonstrated how organizational culture has influenced adoption of new practice changes. Organizational culture refers to the system of shared beliefs among employees based on common characteristics (Marchionni & Ritchie, 2008). Research studies have shown that certain organizational cultures are a strong predictor of sustained change in organizations. Marchionni and Ritchie (2008) conducted a small pilot study of two inpatient units in eastern Canada to assess nurses' perceptions of unit culture and leadership six months after the three-month implementation period of the Braden Score skin assessment tool. The Multifactor

Leadership Questionnaire (MLQ) was used to evaluate leadership behaviors on a 0-4 scale. In addition, the Organizational Learning Survey (OLS) was used to assess the presence of characteristics that encourage a culture of organizational learning. The nurses rated the extent to which the statements described their unit on a 1 – 7 scale. Predominantly, transformational leadership characterized both units. Both units were found to have a presence of culture of learning as found by scores on the OLS and demonstrated nearly identical scores on the MLQ subscales that related to transformational leadership.

The literature review has demonstrated that organizational culture is strongly influenced by those in leadership positions (Marchionni & Ritchie, 2008; **Gifford, Davies, & Edwards, 2006**). In a review of 53 studies conducted by Cummings, MacGregor, Davey, Lee, Wong, Lo, Muise, and Stafford (2010), the researchers concluded that relationship or people centered leadership practices contribute to improving outcomes for patients, productivity, and culture of the healthcare organization. The researchers discussed three types of relationally focused leadership styles: 1) transformational leadership, which empowers and motivates staff nurses to achieve goals and exceed their own expectations, 2) individualized consideration, which focuses on working with staff nurses to realize their full potential and understanding their needs, and 3) resonant leadership, which centers upon the power of coaching and developing staff through motivation and inspiration. Cummings et al. (2010) concluded from six studies that higher satisfaction with the leader was found when leadership styles were charismatic, resonant, and transformational. The researchers also found that in six

studies, reduced productivity was a result of management by exception, transactional, and laissez-faire leadership styles. Similarly, five studies reported lower organizational commitment with management by exception and dissonant leadership styles. In addition, nurses' intent to leave an organization and conflict and ambiguity were significantly higher with management by exception and lower with transformational leadership. Task focused (non-relational) leadership styles are management by exception, transactional, and laissez-faire. Management by exception focuses on evaluating and monitoring change implementation and pays close attention to problems and resolves them. Laissez-faire leadership styles are characterized as avoiding issues and lack of decision making. Passive avoidant leadership is similar in that the leader avoids decision making and only takes action once problems have become serious. In comparison, dissonant leadership is known as a commanding leadership style that does not provide the emotional foundation that nurses need.

**Leadership support.**

Leadership refers to the process whereby a person influences a group of people to work together to achieve a common purpose. Leaders play an important role in influencing nurses' understanding of changes, and thereby influencing nurses' readiness to commit to change. Strong clinical leaders, such as unit-based educators, clinical nurse specialists, managers, directors, and senior nursing staff, are vital in ensuring that practice changes are adopted and sustained within an organization/ department.



The literature review clearly demonstrated that support from nursing leaders and administrators is extremely important in implementing changes into practice and that leaders require a large repertoire of skills and qualities. In a prospective study by Gifford et al. (2006), the researchers aimed to determine leadership behaviors and activities that influenced nurses' use of clinical practice guidelines and affected sustainment two and three years after implementation. Nine organizations participated in the study and each organization was categorized as sustained or non-sustained through an on-site validation process that involved interviewing nurses and leaders. All organizations implemented one of the following practice guidelines: 1) Risk assessment and prevention of pressure ulcers, 2) Prevention of falls and injuries in the older adult, or 3) Promoting continence using prompted voiding and prevention of constipation in the older adult. Gifford et al. (2006) found through multiple interviews that different patterns of leadership were found within organizations that sustained the use of the practice guidelines as compared to those that did not. Study participants identified that support from all levels of leadership was necessary to implement and sustain practice changes. Support was described as encouragement, cheerleading, guiding, educating, and reassuring. Gifford et al. (2006) found that all nine organizations emphasized the need for leaders to be accessible and visible. In the non-sustained organizations, a lack of leadership presence and support was identified by nurses as a factor that contributed to lack of success. In all organizations who sustained the guidelines, it was found that multifaceted methods of communication contributed to success. Leaders used verbal communication, electronic mail, and communication boards as a means to recognize and motivate staff to use the practice

guidelines. The researchers found that leaders in sustained organizations were known for being innovative, acted as role models, monitored clinical outcomes, and supported the need for clinical champions. In contrast, in organizations that did not sustain guidelines the researchers found that clinical champions were not present, there was a lack of staff education, and policies did not reflect the clinical practice guidelines. In addition, after initial implementation there was no dedicated leader or educator facilitating the use of practice guidelines. Often, practice guidelines were seen as a low priority by non-sustained organizations and communication was described by nursing staff as being fragmented and inconsistent. It can be concluded that if an organization's senior leadership is inflexible, lacks vision, and is critical of change, then it will be difficult to implement and sustain change in this type of organization.

In a qualitative study by Lusardi (2012), the author reflects on her department's success in engaging staff, through mentoring and leadership support, to use a delirium and constipation protocol. The author said that in order for practice change to occur, hospital leaders must be supportive of the change and believe in the philosophy that evidence based research is the foundation for high quality patient care. Lusardi (2012) suggested that leaders must consider an organization's or department's commitment to change because the probability for acceptance of change is higher if the nurses and leaders who are involved perceive that a problem exists and that change is needed. It can be concluded that a leader who lacks communication skills and commitment may be detrimental to a change implementation process. The ability of the leader to embrace the

proposed change and anticipate the impact the change will have on a department or organization is crucial to the successful implementation of changes into practice.

It was frequently identified in the literature reviewed that leaders are considered the first source of communication in hierarchical organizations. However, the literature confirmed that leaders often fail to effectively communicate with nurses prior to implementing a change in practice. In a study by Portoghese et al. (2012), the authors aimed to understand the role of leadership and communication to promote change. A predictive, non-experimental design was used with a random sample of 395 nurses. A four-item scale was used to measure the level to which employees felt that they had enough communication to do their job effectively and reasons for changes that affect them are communicated. In addition, employees were asked to rate the relationship with their supervisor using a scale. The authors found that when nurses perceived a high quality relationship with their supervisor and high quality communication was provided related to the change, they had greater opportunity to participate, develop positive expectations of the change, and demonstrate a higher level of commitment to change. Nurses who reported positive expectations were found more likely to commit to the change process because they believed in the changes and benefits and this was found to have a direct effect on commitment to change, whereas negative expectations had a direct effect on long-term commitment to change. Portoghese et al. (2012) concluded that change initiatives promoted by the leader have a greater likelihood of gaining support from staff, and poor leader relationships with staff and lack of communication surrounding the change may result in negative outcomes such as non-compliance,

cynicism, and resistance to the change. Other literature supported the conclusion that when leaders communicate and involve nurses in change processes, they become more engaged and have an increased sense of control over changing their practice (Dammeyer, Mapili, Palleschi, et al., 2012; Portoghese et al., 2012).

Changes that result in a significant impact on daily routine and workload may be seen as an unwanted change by some nurses and may become a significant factor in implementing practice changes. In a study by **Mills, Fields, and Cant** (2011), the researchers conducted a cross-sectional study to determine the factors that affected translation of knowledge into practice for Australian General Practice Nurses. The DEPQ-Au questionnaire was used to evaluate the effect of developing evidenced-based practice skills and knowledge. The authors found that barriers to change practice included nurses' perception that they did not have enough time at work for the change, the culture of the team was not receptive to change, and nurses lacked authority in the work place to change practice. Mills et al. (2011) concluded that in order to increase the likelihood that a change is successful, it is important for the organizational leaders to assess, with the nursing staff, the impact that the practice change will have on nurses' daily routine and workload prior to implementing the change.

Oftentimes, nursing leaders overestimate a department's readiness for change. In an article by **Hauck, Winsett and Kuric** (2012), the researchers aimed to address the organization's readiness for evidenced-based practices (EBPs) by using a specific EBP strategic plan. The study sample included 475 RNs divided into three categories: direct care RNs, indirect care RNs, and directors/leaders. Three instruments were used by

Hauck et al. (2012) in this study. The EBP-B scale examined the difficulty to use and understand EBP and confidence in EBP. All baseline scores of the director/leaders and indirect nurses were higher than direct care RN scores. Direct care RNs had the lowest score at baseline but also had the highest increase in scores for all job roles. Hauck et al. (2012) reported that during the implementation process, the direct care RNs voiced concerns over the lack of support from their unit directors. As a result, the researchers developed a separate EBP course for nursing leaders. According to the researchers, the perception of leadership support improved upon completion of the course. Findings also showed that participants had a higher tendency to believe in the importance of EBP after educational strategies were implemented as evidenced by a 7% increase in scores from baseline mean for all participants. Hauck et al. (2012) concluded that an evidence-based practice strategic plan is crucial for leaders in creating the structure and processes to set targets, share results and to create accountability at the unit level.

### **Personal Factors**

Personal factors in implementing change into practice include level of education, impact on workload or routine, and willingness to change. The goal of education in implementing practice changes is to share information that supports the evidence-based practice change, in order to focus staff nurses on the problem of interest and help them to understand how it is defined. Portoghese et al. (2012) stated that information is vital in shaping nurses' expectations and providing the foundation for developing attitudes (positive and negative) toward change. One of the biggest factors repeatedly found in the literature review related to implementing changes in practice was that nurses are not well

informed of the current evidence and its relationship to the hospital and patients (Dammeyer et al. 2012). According to several studies, problem/ concepts were not clearly defined and it was uncertain if staff and leaders were discussing the same issue (Dammeyer et al. 2012; Lusardi, 2012). Lusardi (2012) explained that when leaders fail to fully educate staff nurses on the rationale for practice change, communication will be disjointed, and compliance may be challenging. The author used an example of implementing a constipation protocol in the ICU several months prior and explained how staff did not define constipation the same way and did not perceive constipation as being a significant problem for patients. The department leaders used multiple education strategies to communicate definitions and benefits of the constipation protocol. Communication strategies identified by the author included shift report, staff meetings, meetings with the educator/CNS, multidisciplinary rounds, and the unit-based clinical practice committee. After implementing the above strategies, non-compliance with the constipation protocol decreased slightly from 8% to 4%.

In several studies reviewed, the authors discussed a nurse's level of education and role as influential factors in implementing change in practice. In a study by **Koh, Manias, Hutchinson, Donath, and Johnston** (2008), the researchers used the Barriers and Facilitators Assessment instrument to assess perceived barriers to practice change. The researchers solicited the opinions of 1850 nurses to identify their perceptions concerning barriers to implementation of new practice guidelines in their hospital and 1467 nurses replied. The first part of the Barriers and Facilitators Assessment instrument consisted of rating various possible barriers to, and facilitators of, the implementation of

change in practice. The second part of the instrument consisted of identification of barriers to and facilitators of implementation of a specific change in practice. The results of this study were used by the researchers to guide the development of implementation strategies targeting barriers to change. The study found that: a) the majority of nurses (65%) were either certificate-trained in the technical institute or possess only a diploma in nursing from the polytechnic, b) 66% of respondents had no research experience, and c) only 24% had a degree qualification. Therefore, it was not surprising that lack of education was a primary influential barrier identified by nurses at four out five hospitals. In order to mitigate this, educational strategies such as reminders, policy revisions, and education sessions were developed. The education sessions were interactive and included the importance of fall prevention and were aimed at promoting and supporting the adoption of the fall prevention guidelines. Koh et al. (2008) and Gifford et al. (2006) used social influence strategies such as the use of change champions and educational sessions. These strategies were shown to be influential in both studies in that the opinions of peers and change champions significantly influenced the attitudes of nurses and their motivation to change practice.

The literature review revealed that use of smaller groups and one-to-one meetings are useful approaches to ensuring that nurses adopt new practice changes. According to Dammeyer et al. (2012), one strategy to engage staff in the implementation of change is to make teaching more personal. The literature review found that the utilization of peer mentoring groups to advise other nurses regarding the implementation of research findings an approach that is being widely used. Mills et al. (2011) surveyed general

practice nurses in Australia and found that these nurses often work apart from other nurses or in a setting where there is no designated leadership position. The authors suggested that a supportive learning approach for nurses via a mentoring program and interactions with an interdisciplinary team may assist nurses with applying learned knowledge into practice.

Several studies discussed the need to re-educate staff nurses using multiple methods; education is not a one-time occurrence. Hunt and Franck (2011) described a pilot project to evaluate the Pediatric Pain Profile (PPP) tool for children with neurological impairments undergoing surgery. The researchers identified several challenges with translating education into practice. Although 17 nurses indicated that they had received enough instruction about the PPP, eight nurses had questions when using the tool in practice, and eight nurses required additional education and one to one coaching in order to use the tool (Hunt & Franck, 2011).

The development of toolkits is one approach that allows customization of information to the specific problem and practice change. Dammeyer et al. (2012) describe the creation of an evidence-based toolkit used to implement the ABCDE bundle for sedation and monitoring of delirium in ICUs across the Michigan Health System. A total of 71 articles were reviewed to provide an overview of the problem, as well as an evidence-based approach to delirium prevention, diagnosis, and treatment. The toolkits included a summary of the evidence, a tool to identify barriers for implementation, baseline metrics to begin measuring performance, and implementation strategies. The users of the toolkit included nurse managers, clinical nurse specialists, staff nurses,



pharmacists, medical director, and respiratory therapy supervisors. Prior to implementing the toolkit in practice, a face-to-face meeting was held to review the final toolkit draft and appendices, and to discuss remaining inconsistencies in the literature. In addition, staff members were provided with educational resources such as slides, learning modules, brochures, flyers, and self-learning modules. Dammeyer et al. (2012) admitted that the sedation and delirium toolkit has been one of the biggest challenges for Michigan Health Association due to conflicting opinions among nurses and other healthcare providers concerning the levels of sedation. The authors reported that the first step in implementing the sedation and delirium management toolkit was to create and communicate an understanding the problem of delirium and its relationship to sedation practices within the ICU. According to current research findings, delirium is experienced by 60% to 80% of patients receiving mechanical ventilation and remains unrecognized in 66% to 84% of patients regardless of care setting (Lusardi, 2012). With an increasing focus on evidence-based practice and a steadily increasing body of research, leaders must understand that it is difficult for any nurse to be competent with all practice standards and simply communicating information to nurses is insufficient to change practice. Hauck et al. (2012) reported that nurses remain overwhelmed as they have an abundance of information and have insufficient time in the workplace to read, search the databases, appraise evidence, and implement new ideas.

### **Framework/ Models of Change**

While numerous models and change frameworks are present in the literature, it was found that organizations do not follow just one. In fact, many change management theories and frameworks found in the literature overlap concepts. Nevertheless, these frameworks and models of change are helpful in explaining nurses' tendency to adopt and change practice during and following the implementation of evidenced-based standards of care.

In a study by Dammeyer et al. (2012), the authors use a collaborative model of care to implement the ABCDE bundle for sedation and delirium management in the ICU across the Michigan Health Association. The Iowa Model of Evidenced-Based Practice was used to compile data and guide implementation. This model focuses on assessing a patient's susceptibility for delirium on admission so that risk factors can be modified accordingly. The Iowa Model includes the following elements: evaluation of knowledge and problem-focused triggers, gathering and critique of the evidence, determining if change is appropriate for adoption in practice, and evaluation and analysis of structure, process, and outcome. This approach to engage interdisciplinary teams, organize work, and communicate information had been proven effective with previous Michigan Health Association initiatives. In this study, the interdisciplinary team worked together to create, standardize, and evaluate what factors will be affected by practice change and rallied leadership support. A keystone project manager coordinated participants, meetings, and the support required for all ICUs to collaborate.

Additional models of change discussed in the literature include the Johns Hopkins Model, the Rossworm and Larrabee Model, and the Stetler model. The Johns Hopkins model has multiple steps starting with the identification of an EBP question to recruiting and assembling a team; collecting, analyzing, summarizing, and rating the strength of the evidence to developing recommendations for practice; and implementing and evaluating change. The Rossworm and Larrabee Model guides clinicians through the full process of EBP and includes six steps: assessing the need for change, identifying potential interventions and outcomes, synthesizing the best evidence, designing a practice change, implementing and evaluating the practice change, and sustaining the practice change. The Stetler Model is a focused model and includes five phases: preparing the research evidence, confirmation of the findings, synthesis of findings and decision to use/not use findings, translation and application, and evaluation (Lusardi, 2011).

Lusardi (2011) describes commonalities among the John Hospkins model, Rossworm and Larrabee model, Stetler Model, and the Iowa model. All four models of change identify a clinical problem, gather best evidence, analyze and evaluate gathered evidence, determine the change in practice, plan and implement practice change, and evaluate the practice change over time. However, in a setting where the problem has been identified and practice change is a result of an evidenced based standard of practice, the above models are not ideal to use as they all focus primarily on the process of gathering evidence to determine the change in practice.

A number of studies focused upon implementing evidence-based practice changes used the Promoting Action on Research Implementation in Health Services (PARIHS)

framework (Malone, 2004; Gozdzik, 2013). Malone (2004) outlines and describes components of the PARIHS framework. The PARIHS framework is specific to implementing change and considers three elements: evidence, context, and facilitation. According to the PARIHS framework, the researcher must be clear about the nature of the evidence being used, the quality of context (culture and leadership), and the amount of facilitation needed to ensure the adoption of the new change in practice. In the PARIHS framework, facilitators are individuals with the necessary skills and knowledge to help individuals, teams, and organizations translate evidence into practice.

Although the PARIHS framework provides a very broad conceptualization of how evidence-based research is used in nursing practice, the concept of leadership remains underdeveloped and primarily theoretical in this framework. In addition, the PARIHS framework does not take into account staffing resources and methods of information dissemination. Gozdzik (2013) used the PARIHS framework to assess an organization's contextual readiness for change and guide the implementation of education for nurses caring for dialysis patients outside of the outpatient dialysis unit. The implementation plan revealed contextual challenges within the organization such as staffing resources which is not a component of the PARIHS framework. **Gozdik** (2013) stated that the organization's degree of willingness to change was weak and this was directly related to a lack of appropriate resources such as staffing shortages, high nursing staff agency, and overtime use. The researcher reported significant delays in the completion of the implementation plan in the emergency department due to competing initiatives. Nevertheless, educational in-services were found to be effective in increasing knowledge

transfer scores by 51 percentage points amongst the nurses on the inpatient nephrology ward which was an improvement in pre-test scores from 36% to posttest scores of 87%.

### **Conclusion**

According to the literature reviewed, although staff nurses are good at identifying patient care problems in the workplace, the process of implementing the research findings is challenging for staff nurses. In all three articles by Koh et al. (2008), Hunt and Franck (2011), and Mills et al. (2011), the authors used multiple educational strategies such as reminders and reinforcements that were proven successful in encouraging and maintaining practice changes. The literature review confirms that even simple practice changes may require coaching to fine tune skills and often reminders, policy changes, and audits are needed to ensure skills are “hardwired” in practice. Audits are necessary to ensure that practice changes are appropriate, successful, and efficient. Studies have demonstrated that if nurses do not have the opportunity to ask questions and express concerns, it will be difficult for leaders to implement research in practice. Nursing engagement and effective communication, at the leadership level, are significant factors in implementing changes in practice (Portoghese et al. 2012; Dammeyer et al., 2012; and Malone, 2004).

The literature review did confirm that there is no one core model or framework to guide the implementation of change in nursing practice nor is there any clear-cut basis for suggesting which specific interventions for which barriers to change are most effective. According to the literature reviewed, implementation strategies need to be

specific to the change setting as no single approach will have universal applicability. The literature supports that the PARIHS framework has several strengths such as its flexibility in application and that concept analyses have been conducted for each element of the framework. However, the concept of leadership remains underdeveloped and primarily theoretical in this framework and therefore it was not a relevant framework to base this practicum upon. Rather than choosing a framework, the implementation plan was based upon the organization and personal factors that affect the implementation of standards of nursing into practice.

Implementing and successfully adopting research findings in nursing practice is perhaps the biggest challenge facing organizations as it is not straight-forward, and can take many years to accomplish (March, 2006). There were multiple factors identified in this literature review that affect translation of knowledge into practice such as sufficient knowledge and skill, leadership support, and having a model for change management. By understanding the factors related to implementation, it was possible to choose change management strategies that will complement the setting, organizational culture, leadership, and staff. In addition, it was possible to develop a focused strategic implementation plan to mitigate and support the factors involved in implementing standards of nursing practice within the acute care setting.

## References

- Cummings, G., MacGregor, T., Davey, M., Lee, H., Wong, C., Lo, E., Muise, M., & Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385.
- Dammeyer, J., Mapili, C., Palleschi, T. et al. (2012). Nurse-Led Change: A Statewide Multidisciplinary Collaboration Targeting Intensive Care Unit Delirium. *Critical Care Nursing*, 35 (1), 2–14.
- Gifford, W., Davies, B., Edwards, N., & Graham, I. (2006). Leadership strategies to influence the use of clinical practice guidelines. *Nursing Leadership*, 19 (4), 74 – 86.
- Gilbert, E. (2011). *Manual of High Risk Pregnancy and Delivery*. 5<sup>th</sup> Ed. Mosby, St. Louis, MO.
- Gozdzik, G. (2013). Applying the PARiHS framework in a knowledge dissemination initiative. *Canadian Association of Nephrology Nurses and Technologists Journal*, 23(2), 48-52.
- Hunt, K., & Franck, L. (2011). Special needs require special attention: A pilot project implementing the pediatric pain profile for children with profound neurological impairment in an in-patient setting following surgery. *Journal of Child Health Care*, 15(3), 210–220.

Hauck, S., Winsett, R., & Kuric, J. (2012). Leadership facilitation strategies to establish evidence-based practice in an acute care hospital. *Advanced Journal of Nursing*, 664 – 675.

Koh, S., Manias, E., Hutchinson, A., Donath, S., & Johnston, L. (2008). Nurses' perceived barriers to the implementation of a fall prevention clinical practice guideline in Singapore hospitals. *BMC Health Services Research*, 8, 105.

Lusardi, P. (2012). So you want to change practice: recognizing practice issues and channeling those ideas. *Critical Care Nurse*, 32 (2), 55-66.

Malone, J. (2004). The PARHIS framework – a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care and Quality*, 19(4), 297 – 304.

March, A. (2006). Facilitating implementation of evidence – based guidelines in hospital settings: learning from trauma centers. *The Commonwealth Fund*, 930.

Marchionni, C., & Ritchie, J. (2008). Organizational factors that support the implementation of a nursing best practice guideline. *Journal of Nursing Management*, 16, 266 – 274.

Mills, J., Feld, J., & Cant, R. (2011). Factors affecting evidence translation for general practice nurses. *International Journal of Nursing Practice*, 17, 455–463.



Portoghese, I., Galletta, M., Battistelli, A., Saiani, L., Penna, M. P., & Allegrini. (2012). Change-related expectations and commitment to change of nurses: the role of leadership and communication. *Journal of Nursing Management*, 20, 582–591.

## Appendix B: Literature Summary Tables

Author/Year Purpose	Methodology Setting/Sample	Findings	Gaps/Limitations (Future Research)
<p><b>Koh et al. (2008)</b></p> <p>Purpose: Assess perceived barriers to practice change by eliciting nurses' opinions with regard to barriers to, and facilitators of, implementation of a fall prevention guidelines.</p> <p>Social influence theory was used to expand the authors understanding of the social processes which influence success of guideline</p>	<p>The validated questionnaire, 'Barriers and facilitators assessment instrument', was administered to nurses (n = 1830) working in the medical, surgical, geriatric units, at five acute care hospitals in Singapore.</p> <p>Each questionnaire took approximately 15 minutes to complete. A total of 21 items. A four-week time frame was allowed from</p>	<p>The greatest barriers to implementation of clinical practice guidelines reported included: knowledge and motivation, availability of support staff, access to facilities, health status of patients, and education of staff and patients.</p> <p>A primary influential factor identified in four out five hospitals was education.</p> <p>The majority of nurses (65%) are either certificate-trained in the technical institute or</p>	<p>Limited testing of the revised tool - six questions which were not relevant in the context of the implementation of the CPG in Singapore was removed from the instrument.</p> <p>The first study to examination the Singaporean context.</p> <p>Reporting bias associated with the self-report</p>

<p>implementation.</p> <p>Koh et al. continued</p>	<p>distribution to return date.</p> <p>Study was undertaken as part of a larger study.</p> <p>The mean age of respondents was 29.5 years (range: 18 – 62 years), while the mean number of years working as a nurse was 7.6 years.</p> <p>Hospitals were acute care tertiary teaching facilities with an average bed capacity of 1000.</p>	<p>possess only a diploma in nursing from the polytechnic.</p> <p>66% of respondents had no research experience and even fewer (24%) had a degree qualification.</p> <p>73.3% of respondents perceived a lack of facilities and equipment such as bed alarms to be a barrier to the implementation of guidelines.</p> <p>71% of respondents reported 'availability of supporting staff' as a barrier to implementation of guidelines.</p> <p>4.4% of respondents</p>	<p>method raises questions about whether the responses accurately represent nurses' actual experiences.</p>
--	---	--	---

		<p>perceived leadership as a barrier to implementation.</p> <p>Strategies to influence behavior change through social influence, included the use of change champions and educational sessions. These strategies have been shown to be effective and were used in the present study. The opinions of peers and change champions significantly influenced the attitudes of care providers their motivation to change practice.</p>	
--	--	---	--

<p><b>Author/Year</b> <b>Purpose</b></p>	<p><b>Methodology</b> <b>Setting/Sample</b></p>	<p><b>Findings</b></p>	<p><b>Gaps/Limitations</b> <b>(Future Research)</b></p>
<p><b>Mills, Field, &amp; Cant (2011)</b></p> <p>Purpose: Examine sources of practice knowledge among nurses, identify barriers and/or facilitators to use of research findings, and their ability to obtain research.</p>	<p>1800 Australian general practice nurses surveyed with 33% response rate (n= 590).</p> <p>Questionnaire used in this study was the DEPQ-Au. based on the Developing Evidence-based Practice Questionnaire (DEPQ).</p> <p>The questionnaire consists of 49 main questions each with five-point response scales scored between</p>	<p>A perceived lack of time to access knowledge for practice.</p> <p>The use of in-service education and training opportunities as the main source of evidence for practice.</p> <p>Engagement in experiential learning is an important source of knowledge for practice.</p> <p>Participants' skills in translating evidence into practice showed low self -</p>	<p>A large majority of nurses in this study had obtained their nursing qualification &gt; 10 years before the survey was conducted; future research needed on nurses who recently obtained nursing qualification</p> <p>Australian practice nurses often work in isolation from other nurses, or in a context where</p>

	<p>1 and 5, based on frequency.</p> <p>Internal consistency of the questionnaire was confirmed</p> <p>The overall Cronbach alpha coefficient for the DEPQ with hospital nurses (<math>n = 598</math>) and community nurses (<math>n = 689</math>) in the UK was 0.87 exceeding the expected Cronbach alpha: <math>&gt; 0.7</math>.</p>	<p>assessment scores.</p> <p>Organizational barriers included lack of work time, not knowing where to locate research reports and protocols</p> <p>Supportive learning via a mentoring program was found beneficial by Newhouse <i>et al.</i> for registered nurses working part-time.</p>	<p>there is no designated leadership role in a nursing team.</p> <p>DEPQ survey may lack in generalizability.</p>
--	--	--	---

<p><b>Author/Year</b> <b>Purpose</b></p>	<p><b>Methodology</b> <b>Setting/Sample</b></p>	<p><b>Findings</b></p>	<p><b>Gaps/Limitations</b> <b>(Future Research)</b></p>
<p><b>Hauck et al. (2012)</b></p> <p>Purpose: To assess nurses' beliefs of the importance of EBP, frequency of using EBP in practice and perception of organizational readiness for EBP after implementation of an EBP strategic plan.</p> <p>A secondary purpose was to assess beliefs, frequency and readiness by three levels of nurses: direct care nurses,</p>	<p>Prospective, descriptive comparative study.</p> <p>429-bed non-teaching, hospital located in a moderate sized city in the Midwest USA.</p> <p>Sample included 475 RNs.</p> <p>Nurses who practiced greater than 50% at the bedside were defined as direct care RNs.</p>	<p>57% participation rate.</p> <p>The EBP-Beliefs scale examined the difficulty to use, understand and confidence in EBP. The belief scores increased 7% from baseline mean for all participants.</p> <p>The baseline scores of the indirect care RNs and Director/Leaders were higher than direct care RN scores.</p> <p>The EBP-Implementation scale examined frequency of performing EBP tasks during the previous 8 weeks. Both baseline and</p>	<p>The investigator was a well-known nursing leader who went to meeting and encouraged participation.</p> <p>At the conclusion of the data collection period, forty gift prizes were distributed to participants.</p> <p>Cross sectional convenience sample was analyzed as independent samples</p>

<p>indirect care nurses and director/leaders.</p>	<p>Nurses who were in clinical care but spent less than 50% at the bedside were defined as indirect care RNs.</p> <p>Director/leaders were defined as nurses who functioned in a leadership capacity.</p> <p>Data were collected at two time points - December 2008 and December 2010.</p>	<p>final scores remained low and no differences were detected between the total group scores.</p> <p>Direct Care RNs had the lowest score at baseline and had the highest increase for all job roles.</p>	<p>All individual strategies were assessed together, and were evaluated as a whole in creating the culture.</p>
---	--	---	---



<b>Author/Year</b>  <b>Purpose</b>	<b>Methodology</b>  <b>Setting/Sample</b>	<b>Findings</b>	<b>Gaps/Limitations</b>  <b>(Future Research)</b>
<p><b>Gozdik (2013)</b></p> <p>Purpose: Describe the process of facilitating knowledge dissemination using the Promoting Action on Research Implementation In Health Services (PARIHS) framework.</p> <p>Three core elements: the nature of the evidence, the context into which the evidence is to be implemented, and the method by which the</p>	<p>Emergency department, intensive care unit (ICU) and in-patient nephrology nurses</p> <p>The learning needs of the nurses were assessed using a survey in both paper and electronic versions.</p> <p>Based on learning needs, education sessions were developed by a multidisciplinary team.</p> <p>Sessions were didactic in nature,</p>	<p>Initial learning needs assessment response rates were lowest at 18% in the emergency department, 29% in the ICU, and 35% on the in-patient nephrology unit.</p> <p>Indicators of contextual readiness were weak within the organization. There was a lack of appropriate resources—for example, chronic staffing shortages, and high nursing staff agency and overtime use.</p> <p>The decision-making process was not always appropriate and transparent, and the</p>	<p>Evaluation of nephrology patient outcomes was not measured due to time constraints.</p>

<p>process is facilitated.</p>	<p>and discussion was encouraged by the facilitator.</p> <p>Knowledge was assessed with pre and post tests.</p> <p>The context of the organization was analyzed by using observation and through discussions with the author's preceptor on the sub-elements of context: culture, leadership, and evaluations.</p> <p>One-on-one interviews were completed with CPLs, managers, and the clinical nurse specialist for dialysis</p>	<p>degree of willingness to change was weak, and was directly related to the individuals making up the team and their years of experience.</p> <p>A hospital-wide IT upgrade was being implemented at the same time as this educational initiative which resulted in delays in the completion of the implementation plan. In the emergency department, education sessions were not provided at all.</p> <p>Staff nurses were often unable to attend education sessions due to time constraints and workload issues.</p>	
--------------------------------	--	---	--

	<p>access to gauge the current contextual readiness for change and education.</p> <p>The author's ability to facilitate education sessions was evaluated by the preceptor and reflected on by the author in order to determine the preferred type of facilitation method used.</p>	<p>54% of nurses who attended the education sessions were not permanently assigned to the in-patient nephrology unit.</p>	
--	--	---	--

<p><b>Author/Year</b> <b>Purpose</b></p>	<p><b>Methodology</b> <b>Setting/Sample</b></p>	<p><b>Findings</b></p>	<p><b>Gaps/Limitations</b> <b>(Future Research)</b></p>
<p><b>Gifford, Davies, and Edwards (2006)</b></p> <p>The researchers conducted a study to determine leadership behaviors and activities that influenced nurses' use of clinical practice guidelines.</p> <p>Investigated factors that affected the sustainment of clinical practice guidelines two and three years after implementation.</p> <p>Study also aimed to</p>	<p>Prospective study in the province of Ontario, Canada.</p> <p>Data sources consisted of audiotaped provider and staff interviews, transcribed interviews, group telephone interviews, written summary reports, interviews with leaders.</p> <p>Nine organizations participated in the study (75% participation rate). Organizations ranged</p>	<p>Compared with the sustained organizations, the non-sustained organizations:</p> <ul style="list-style-type: none"> <li>• Had lower response rates</li> <li>• Had different patterns of leadership</li> </ul> <p>Study participants identified that support from all levels of leadership is necessary to implement and sustain practice changes.</p> <p>All nine organizations surveyed emphasized the need for leaders to be accessible and visible.</p> <p>In the non-sustained</p>	<p>Participation rates were good.</p> <p>Rigor of research was maintained by audiotaping and transcribing verbatim</p> <p>Lack of research on what leaders do to effectively implement and sustain guidelines.</p> <p>Participants were interviewed on general factors that impacted on guideline use.</p>

<p>develop a theoretical model of leadership</p>	<p>from 150-750 beds.</p> <p>Each organization was categorized as sustained or non-sustained through a validation process.</p>	<p>organizations, after initial implementation, there was no dedicated leader or educator facilitating the use of the guidelines. Practice guidelines were seen as a low priority and communication was described by nursing staff as being fragmented and inconsistent.</p>	<p>Data collection and analysis did not occur concurrently.</p> <p>Not possible to tell from the data which leadership activities or behaviors were more effective than others</p>
--	--	--	--

<p><b>Author/Year</b></p> <p><b>Purpose</b></p>	<p><b>Methodology</b></p> <p><b>Setting/Sample</b></p>	<p><b>Findings</b></p>	<p><b>Gaps/Limitations</b></p> <p><b>(Future Research)</b></p>
<p><b>Marchionni and Ritchie (2008)</b></p> <p>A study of organizational factors that influence best practice</p> <p>Sought to determine if a culture of leadership was present on these units and whether there are differences between units.</p>	<p>Pilot study conducted of two inpatient units in eastern Canada. Units were selected by convenience.</p> <ol style="list-style-type: none"> <li>1. 50 bed general medical unit with 53 part time and full time nurses</li> <li>2. 15 bed surgical floor with urology and plastic surgery specialties; 27 full time and part time nurses</li> </ol> <p>Descriptive survey design using self-report questionnaires</p> <p>Assessed nurses' perceptions of unit</p>	<p>Variability in guidelines regardless of organizational culture and leadership</p> <p>Predominantly, transformational leadership characterized both units.</p> <p>Both units were found to have a presence of culture of learning as found by scores on the OLS and demonstrated nearly identical scores on the MLQ subscales that related to transformational leadership.</p> <p>Both units demonstrated a</p>	<p>Low response rate (25%). Only twenty surveys returned to assess nurses' perceptions of unit culture and leadership 6 months after the 3 month period for guideline implementation.</p> <p>Further studies needed to examine the leadership and culture on units that do not volunteer to participate a study</p>

	<p>culture and leadership 6 months after the 3-month period for guideline implementation.</p> <p>The organizational learning survey was used to assess the factors that promoted organizational learning. Nurses rated on a 1 to 7 scale. Internal consistency is good.</p> <p>Multifactor Leadership Questionnaire was used to evaluate leadership behaviors on a 0-4 scale.</p> <p>The Organizational Learning Survey</p>	<p>significant increase (at least 30%) in the number of charts with a documented Braden score.</p>	<p>Further research on strategies to increase participation in studies.</p>
--	---	--	---

	<p>(OLS) was used to assess the presence of characteristics that encourage a culture of organizational learning.</p> <p>The nurses rated the extent to which the statements described their unit on a 1 – 7 scale.</p> <p>The extent to guideline implementation was defined as the change in outcome up to 6 months later and included the percentage of patient who had a skin assessment documented upon admission.</p>		
--	--	--	--



**Appendix C: Factors and Strategies That Can Affect Successful Implementation**

Type of Issue	Specific Issues	Potential Strategies
<p><b>Workload concerns</b></p>	<ul style="list-style-type: none"> <li>• The change may impact daily routine and workload and may be seen as an unwanted change by some nurses.<sup>1,2</sup></li> <li>• Staff may perceive that there is not enough time at work for the change.<sup>1,2</sup></li> <li>• Staff shortages contribute to workload.<sup>2</sup></li> <li>• Nurses may perceive that they have an abundance of information and have insufficient time in the workplace to read, search the databases, appraise evidence, and implement new ideas.<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Leaders should assess, with the nursing staff, the impact that the practice change will have on nurses' daily routine and workload prior to implementing the change.<sup>2</sup></li> <li>• Increase nurses' sense of control over change.<sup>3,4,5</sup></li> </ul>
<p><b>Understanding of the change</b></p>	<ul style="list-style-type: none"> <li>• Staff do not understand the rationale for the change.<sup>2,3</sup></li> <li>• Policies do not reflect clinical practice guidelines.<sup>6</sup></li> <li>• Practice guidelines are seen as a low priority by non-sustained organizations.<sup>6</sup></li> <li>• There is no dedicated leader or educator facilitating the use of practice guidelines.<sup>7</sup></li> </ul>	<p><b>Staff involvement:</b></p> <ul style="list-style-type: none"> <li>• Use evidence-based practice strategic plans to create structure and processes to set targets, share data and create accountability at the unit level.<sup>1</sup></li> <li>• Get nurses involved in the change.<sup>8</sup></li> </ul> <p><b>Education:</b></p> <ul style="list-style-type: none"> <li>• Encourage staff to ask questions about the change.<sup>2</sup></li> <li>• Develop an educational toolkit to customize information to the specific problem and practice change.<sup>4</sup></li> <li>• Develop educational resources such as learning modules, brochures, flyers, self-learning modules, reminders, policy and</li> </ul>

Type of Issue	Specific Issues	Potential Strategies
		<p>procedure, and in-services. <sup>2,3,4,5</sup></p> <ul style="list-style-type: none"> <li>• Use more personal and 1:1 teaching. <sup>5,8,9</sup></li> <li>• Use verbal communication, electronic mail, and communication boards as a means to recognize and motivate staff to use the practice guidelines. <sup>7,8</sup></li> </ul>
<b>Unit culture</b>	<ul style="list-style-type: none"> <li>• The culture of the team is not receptive to change. <sup>3</sup></li> <li>• Communication is fragmented and inconsistent. <sup>6,8,9</sup></li> <li>• Staff demonstrate reduced productivity. <sup>3,8</sup></li> <li>• There are low levels of organizational commitment. <sup>3</sup></li> <li>• There are high nurse turnover rates, conflict and ambiguity. <sup>3,8</sup></li> <li>• The organization has competing priorities. <sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Clear roles and decision making are required within the organization. <sup>3</sup></li> <li>• Use peer mentoring groups to advise other nurses regarding the implementation of research findings. <sup>4</sup></li> <li>• Use change champions within the department. <sup>5,6,11</sup></li> <li>• Leaders need to be accessible and visible. <sup>6,8,9</sup></li> <li>• Support from all levels of leadership is necessary to implement and sustain practice changes. <sup>6,8,9</sup></li> </ul>
<b>Lack of involvement in change</b>	<ul style="list-style-type: none"> <li>• Staff do not have a relationship with their leader. <sup>9</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Build a relationship between staff and the leader. <sup>5,6,9</sup></li> <li>• Get nurses involved in the change. <sup>8,9,10,11</sup></li> <li>• Increase nurses' sense of control over changing</li> </ul>

Type of Issue	Specific Issues	Potential Strategies
		<p>their practice through communication and department champions.<sup>4,8</sup></p>
<p><b>Negative expectations</b></p>	<ul style="list-style-type: none"> <li>• Staff do not believe the change will stick as changes in the past have failed.<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Communicate positive expectations of the change.<sup>9,11</sup></li> <li>• Demonstrate commitment to change.<sup>9</sup></li> </ul>
<p><b>Leadership support</b></p>	<ul style="list-style-type: none"> <li>• Leaders in the department have unclear roles.<sup>3</sup></li> <li>• Leaders in the department have lack of authority over staff.<sup>9,10</sup></li> <li>• There are poor leader relationships with staff.<sup>9</sup></li> <li>• There is a lack of communication surrounding the change.<sup>3,8,9</sup></li> <li>• Staff show negative outcomes such as non-compliance, cynicism, and resistance to the change.<sup>6</sup></li> <li>• Leaders overestimate a department's readiness for change.<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Leaders must provide the emotional foundation that nurses need.<sup>4,6,8</sup></li> <li>• Leaders must communicate an understanding of the problem and the rationale for change.<sup>3,4,8</sup></li> <li>• Leaders must act as change agents to guide performance.<sup>3,4,8</sup></li> <li>• Leadership support is described as encouragement, cheerleading, guiding, educating, and reassuring.<sup>4,6,8</sup></li> <li>• Change initiatives promoted by the leader have a greater likelihood of gaining support from staff.<sup>9,11</sup></li> <li>• Charismatic, resonant, and transformational leadership styles result in higher staff satisfaction.<sup>9</sup></li> </ul>

## References

1. Hauck, S., Winsett, R., Kuric, J. (2012). Leadership facilitation strategies to establish evidence-based practice in an acute care hospital. *Advanced Journal of Nursing*, 664 – 675.
2. Mills, J., Feld, J., Cant, R. (2011). Factors affecting evidence translation for general practice nurses. *International Journal of Nursing Practice*, 17, 455–463.
3. Dammeyer, J., Mapili, C., Palleschi, T. et al. (2011). Nurse-Led Change: A Statewide Multidisciplinary Collaboration Targeting Intensive Care Unit Delirium. *Critical Care Nursing*, 35 (1), 2–14.
4. Portoghese, I., Galletta, M., Battistelli, A., et al. (2012). Change-related expectations and commitment to change of nurses: the role of leadership and communication. *Journal of Nursing Management*, 2012, 20, 582–591.
5. Malone, J. (2004). The PARHIS framework – a framework for guiding the implementation of evidence-based practice. *Journal of Nursing Care and Quality*, 19(4), 297 – 304.
6. Gifford, W., Davies, B., Edwards, N., Graham, I. (2006). Leadership strategies to influence the use of clinical practice guidelines. *Nursing Leadership*, 19 (4), 74 – 86.
7. Marchionni, C., Ritchie, J. (2008). Organizational factors that support the implementation of a nursing best practice guideline. *Journal of Nursing Management*, 16, 266 – 274.
8. Lusardi, P. (2012). So you want to change practice: recognizing practice issues and channeling those ideas. *Critical Care Nurse*, 32 (2), 55-66.
9. Cummings, G., MacGregor, T., Davey, M., Lee, H., Wong, C., Lo, E., Muise, M., Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385.
10. Gozdzik, G. (2013). Applying the PARiHS framework in a knowledge dissemination initiative. *Canadian Association of Nephrology Nurses and Technologists Journal*, 23(2), 48-52.<sup>10</sup>

11. Koh, S., Manias, E., Hutchinson, A., et al. (2008). Nurses' perceived barriers to the implementation of a fall prevention clinical practice guideline in Singapore hospitals. *BMC Health Services Research*, 8, 105.

## Appendix D: Bakersfield Memorial Hospital

### Policies and Procedures

SUBJECT: STANDARDS OF NURSING PRACTICE FOR THE ANTEPARTUM PATIENT

CATEGORY: Departmental

SECTION: Labor & Delivery Unit – Family Care Unit

#### **Purpose:**

The purpose of this nursing policy is to define standards of nursing practice for antepartum patients admitted to Labor and Delivery (L&D) Unit or Family Care Unit.

#### **Guidelines/Policy Statement:**

1. Antepartum patients will be assigned or transferred to a room in the Family Care Unit, unless a) delivery is imminent, b) the patient is receiving IV magnesium sulfate, c) continuous fetal monitoring is required due to the patient's diagnosis, or d) Labor and Delivery Unit is preferred and ordered by the OB physician.
2. Each patient admitted to the Labor and Delivery Unit or Family Care Unit will receive a full assessment by her primary RN within one hour after admission. Assessment should include the following:
  - a. History of present illness.
  - b. Date of last menstrual period / estimated gestational age.
  - c. Presence or absence of vaginal bleeding, discharge, or rupture of membranes.
  - d. Presence or absence of uterine contractions and/or abdominal pain.
  - e. Obstetrical history (gravida, para, spontaneous abortions, stillbirths, preterm delivery).
  - f. Complete set of vital signs (blood pressure, pulse, respiratory rate, SP02 level, and pain level).
  - g. Full physical assessment which includes the completion of the fall risk and skin screening tools.
    - i. For patients greater than 16 weeks, the assessment should include the completion of fetal heart tones with a Doppler. This should be documented in the medical record.

3. An antepartum patient admitted through the emergency room will have a nonstress test to verify fetal well-being prior to admission to the Family Care Unit. The Labor and Delivery Unit nurse is responsible for placing, interpreting, and documenting the electronic fetal monitoring of the patient.
4. If an antepartum patient is admitted through Labor and Delivery Unit with a physician's order for a nonstress test every shift, the nonstress test will initially be completed in the Labor and Delivery unit prior to the transfer of the patient to Family Care Unit.
5. In the case of antepartum patients admitted to the Family Care Unit who require fetal well-being monitoring or nonstress test every shift/day, the Family Care Unit primary RN is expected to notify the Labor and Delivery Unit charge nurse and communicate the name and room number of the antepartum patient who requires fetal monitoring. The Family Care Unit nurse will use a Doppler to obtain fetal heart tones for fetuses greater than 16 weeks every 4 hours with vital signs unless otherwise ordered by the physician.
6. When a Family Care Unit nurse notifies the OB physician and Labor and Delivery charge RN of signs of maternal/fetal distress and/or changes in condition, it is the expectation that a Labor and Delivery Unit nurse will respond immediately to the Family Care Unit, assess the patient's condition, and notify the OB physician as appropriate.
7. A Labor and Delivery Unit nurse will place antepartum patients in the Family Care Unit on the electronic fetal monitor and document fetal surveillance and an obstetrical assessment. Only a nurse with an electronic fetal monitoring certification can complete the documentation. A full description of an EFM tracing requires a qualitative and quantitative description of:
  - a. Uterine contractions
  - b. Baseline fetal heart rate
  - c. Baseline fetal heart rate variability
  - d. Presence of accelerations
  - e. Periodic or episodic decelerations
  - f. Changes or trends of FHR patterns over time
8. Any decline in maternal or fetal status while the patient is admitted to the Family Care Unit warrants immediate physician and charge nurse notification.

The Labor and Delivery Unit charge nurse is to be contacted immediately to assess the patient for possible transfer. In the case of a transfer, the Family Care Unit nurse will receive transfer orders from the patient's primary OB physician or OB hospitalist physician. The Family Care Unit primary nurse is to give report to receiving Labor and Delivery Unit nurse. The patient should be accompanied to the Labor and Delivery Unit by a licensed nurse or physician.

9. A full assessment will be completed every shift or more frequently as the patient's condition warrants. All patients will be assessed on an ongoing basis for maternal and/or fetal complications that may occur and require transfer higher level of care. Any of the following conditions warrants the notification of the Labor and Delivery Unit charge nurse and OB physician, or designate, for further evaluation. These conditions include:
  - a. Category II or III fetal heart rate tracing
  - b. Maternal complications including new onset fever greater than 101°F, unstable blood pressure, heart rate, and/or oxygenation
  - c. Increased vaginal bleeding
  - d. Hyper-reflexes, seizures
  - e. Bulging amniotic bag with dilation greater than 2 cms
  - f. Ruptured amniotic membranes with fetal heart rate decelerations
  - g. Increased uterine contractions greater than 4 per hour
  - h. New onset back or lower abdominal pain
  - i. Uncontrolled hypertension with headaches, blurred vision, epigastric pain
  - j. Spontaneous rupture of membranes
  - k. Increased or sudden pain or pressure in abdomen, feeling that the baby is "pushing down"
  - l. Shortness of breath and or chest pain



**Definitions:**

1. Fetal heart rate patterns are defined by the characteristics of baseline, variability, accelerations, and decelerations.
2. A nonstress test identifies whether an increase in the fetal heart rate occurs when the fetus moves, and the ability of the fetal heart to respond to stimuli. FHR accelerations without fetal movement are also considered a reassuring sign of adequate fetal oxygenation.
3. A reactive fetal pattern has at least two fetal heart accelerations with or without fetal movement detected by the woman, occur within a 20 minute period, peak at least 15 beats per minute above the baseline, and last 15 seconds from baseline for fetuses over 32 weeks and 10 beats above baseline lasting 10 seconds for fetuses below 32 weeks.
4. An acceleration is an apparent abrupt increase in FHR. An *abrupt* increase is defined as an increase from the onset of acceleration to the peak in less than 30 seconds. To be called an acceleration, the peak must be greater than or equal to 15 bpm, and the acceleration must last greater than or equal to 15 seconds from the onset to return. A prolonged acceleration is greater than or equal to 2 minutes but less than 10 minutes in duration. Finally, an acceleration lasting greater than or equal to 10 minutes is defined as a baseline change. Before 32 weeks of gestation, accelerations are defined as having a peak greater than or equal to 10 bpm and a duration of greater than or equal to 10 seconds.
5. Decelerations are classified as late, early, or variable. Variable decelerations may be accompanied by other characteristics and requires the immediate notification of the obstetrical physician. Some examples include a slow return of the FHR after the end of the contraction, biphasic decelerations, and tachycardia after variable deceleration(s).
6. A prolonged deceleration is present when there is a visually apparent decrease in FHR from the baseline that is greater than or equal to 15 bpm, lasting greater than or equal to 2 minutes, but lasting less than 10 minutes. A deceleration that lasts greater than or equal to 10 minutes is a baseline change.
7. Preeclampsia is the development of hypertension and proteinuria in previously normotensive patient after 20 weeks of gestation or in the early postpartum period.
8. Preeclampsia superimposed is the development of preeclampsia or eclampsia in a patient with chronic hypertension.

**Procedure:**

Dependent upon patient risk status and department policy, antepartum patients will be cared for according to the following nursing care standards. Nursing standards are used in conjunction with a physician's orders.

**1. Less than 24 Weeks Gestation**

Low risk antepartum patients will have an assessment performed by an RN each shift. Low risk care shall consist of the following:

- a. Assessment of fetal heart rate with a doppler every 4 hours in conjunction with vital signs for patients greater than 16 weeks gestation or as ordered by a physician. The fetal heart rate numeric value as well as the location on the abdomen will be documented in the nurse's notes.
- b. Assessment and documentation of temperature, pulse, respiration, blood pressure, and pain assessment a minimum of every four hours or as ordered by physician.
- c. Bathroom privileges unless contraindicated by the patient's condition.
- d. Placement of a sequential compression device if the patient is on strict bedrest.

**2. Preterm Premature Rupture of Membranes**

Preterm Premature Rupture of Membranes (PPROM) describes ruptured membranes earlier than the end of the 37th week of gestation, with or without contractions. PPRM is associated with preterm labor and birth. The standard of practice for the woman with PPRM shall include:

- a. Physical assessment every shift
  - i. Assessment of uterine tenderness, presence of contractions, signs of intraamniotic infection, vaginal odor or discharge.
- b. Assessment of fetal heart tones every four hours with vital signs if gestation is greater than 16 weeks. A nonstress test will be performed once per shift if gestation is greater than or equal to 24 weeks.
- c. Assessment of temperature every 4 hours or per physician order; pulse, respiration, blood pressure, and pain assessment a minimum of every four hours or as ordered by physician.
- d. Strict bedrest unless otherwise ordered by physician.

- e. Placement of a sequential compression device if the patient is on strict bedrest.
- f. Documentation of fetal status is required hourly if the patient is being continuously monitored. Documentation will consist of the fetal heart rate, periodic patterns and long-term or short-term variability. Documentation of the maternal status shall include frequency, duration and intensity of contractions.
- g. Hydration of the patient with oral fluids or IV bolus as ordered by physician.
- h. Referral to social services to assess coping skills and support system.

3. **Preterm Labor**

Preterm labor begins after the 20<sup>th</sup> week but before the end of the 37<sup>th</sup> week of pregnancy. Preterm labor may result in the birth of an infant who is ill equipped for extrauterine life.

The standard of practice for the woman with PTL shall include:

- a. Physical assessment every shift.
- b. Assessment of fetal heart tones every 4 hours with vital signs or as ordered by a physician.
- c. Fetal monitoring as ordered by OB physician with strip interpretation.
- d. Assessment of fetal well-being (nonstress test) once per shift if gestational age is greater than or equal to 24 weeks.
- e. Assessment of the patient's temperature, pulse, respiration, blood pressure, oxygenation, and pain assessment a minimum of every four hours. Pulse, respiration, blood pressure and pain will be assessed every one hour when the patient has a magnesium sulfate drip.
- f. Documentation of strict intake and output if patient is on magnesium sulfate.
- g. Strict bedrest unless otherwise ordered by physician.

- h. Placement of a sequential compression device if the patient is on strict bedrest.
- i. Documentation of fetal status is required hourly while patient is being monitored. Documentation will consist of the fetal heart rate, and patterns of variability. Documentation of the maternal status shall include frequency, duration and intensity of contractions.
- j. Documentation of fetal and maternal strip interpretation is required in the electronic fetal monitoring computer system.
- k. Communication with the OB physician is required if the patient has symptoms of preterm, including low back pain, menstrual like cramps, pelvic pressure, and vaginal discharge.
- l. Appropriate actions to be taken by the nurse if pre-term labor symptoms occur include having the patient lie down on her side, having her drink two to three glasses of water, and having the nurses palpate to identify the presence of uterine contractions.

4. **Preeclampsia/ eclampsia**

- l. The criteria for the diagnosis of preeclampsia is a blood pressure of 140 mmHg systolic or higher or 90 mmHg diastolic or higher that occurs after 20 weeks of gestation in a women with previously normal blood pressure.

The standard of practice for the woman with preeclampsia without severe features includes:

- a. Physical assessment every shift; subjective signs of preeclampsia include headaches, visual changes such as blurred vision, pitting edema to face/abdomen or extremities, nausea or vomiting, hyperreflexia, and epigastric or right upper quadrant pain.
- b. Assessment of deep tendon reflexes every 4 hours.
- c. Completion of fetal monitoring per physician's orders.
- d. Temperature, pulse, respiration, blood pressure and pain assessment, including fetal heart tones, a minimum of every four hours or as ordered by a physician.

- e. Documentation of strict intake and output if the patient is on magnesium sulfate.
- f. Strict bedrest unless otherwise ordered by physician.
- g. Placement of a sequential compression device if the patient is on strict bedrest.
- h. Documentation of the patient's daily weight as ordered by the physician.
- i. Evaluation of the urine for protein, specific gravity, pH, and glucose per physician order.
- j. Education of the patient on the signs and symptoms that indicate that preeclampsia is worsening, with instructions to report immediately to the RN/ physician:
  - i. Headaches
  - ii. Vision changes, blurry vision or seeing spots
  - iii. Epigastric pain or RUQ pain
  - iv. Increased swelling or weight gain more than 5 pounds in one week
  - v. Vaginal bleeding or changes in vaginal discharge
  - vi. Decreased fetal movements compared with the movements of the previous day or fewer than 10 fetal movements in any 2 hour period
- II. Preeclampsia is considered severe if one or more of the following criteria is present:
  - i) blood pressure of 160 mm Hg systolic or higher or 110 mm Hg diastolic or higher on two occasions at least 6 hours apart while on bedrest, OR ii) Proteinuria of 5g or higher in 24 hour urine specimen or 3+ or greater on two random urine samples collected at least 4 hours apart.

The standard of practice for the woman with preeclampsia with severe features includes:

- a. Documentation of fetal monitoring as ordered by the physician. Fetal status will be documented hourly while the patient is being continuously monitored. Documentation will consist of the fetal heart rate, periodic changes, and variability. Documentation of the maternal status shall include frequency, duration and intensity of contractions.

- b. Assessment and documentation of temperature, pulse, respiration, blood pressure, oxygenation, and pain assessment, including fetal heart tones, a minimum of every four hours or more frequently as ordered by a physician. Assessment of pulse, respiration, blood pressure, and pain every two hours when the patient has a magnesium sulfate drip.
  - c. Evaluation of the presence of edema to face, abdomen, and extremities every shift.
  - d. Documentation of the patient's daily weight.
  - e. Assessment of deep tendon reflexes every 4 hours.
  - f. Strict bedrest unless otherwise ordered by physician.
  - g. Placement of a sequential compression device if the patient is on strict bedrest.
  - h. Evaluation of urine for protein, specific gravity, PH, and glucose every 8 hours or more frequently as ordered by the physician.
  - i. Assessment of the patient for signs and symptoms of worsening condition:
    - i. Auscultation of lung fields for wheezing or crackles which may indicate pulmonary edema.
    - ii. Assessment of the patient's skin color for cyanosis.
    - iii. Assessment of the patient for indications of possible DIC such as bleeding, oozing from IV sites, nosebleeds, or petechiae.
    - iv. Assessment of the patient for signs of abruptio placentae, including dark red vaginal bleeding, sustained abdominal pain, uterine tenderness, and increased fundal height.
  - j. Documentation of fetal movements every shift.
  - k. Assessment and monitoring of the patient for HELLP signs and symptoms.
- III. Eclampsia is the development of seizures in the preeclamptic patient. During a seizure, the responsibilities of the nurse is to:
- a. Remain with the patient.
  - b. Call an OB alert.
  - c. Observe seizure activity for the time of occurrence, length of seizure, and type of seizure activity.
  - d. Transfer the patient to the Labor and Delivery Unit if admitted to the Family Care Unit or receiving care in the OB triage unit.
  - e. Perform continuous fetal monitoring to ensure fetal oxygenation.
  - f. Assess temperature, pulse, respiration, blood pressure, oxygenation, and pain including fetal heart tones, a minimum of every two hours or more frequently as ordered by a physician.
  - g. Initiate magnesium sulfate per physician's order (See DP-LD 119: Intravenous magnesium sulfate administration policy).
  - h. Implement seizure precautions.
    - i. Assess frequently for uterine contractions.
    - j. Assess for signs of HELLP syndrome and DIC.
    - k. Measure and document strict intake and output.
    - l. Consult with the physician regarding the initiation of delivery.

5. **Second and Third Trimester Bleeding**

After 20 weeks of pregnancy, the two major causes of bleeding are placenta previa and abruptio placentae. The most common sign of placenta previa is the sudden onset of painless uterine bleeding in the last half of pregnancy. Signs and symptoms of abruptio placentae include uterine tenderness, increased uterine activity with poor relaxation between contractions, and abdominal pain. Patients with active bleeding are considered an emergency and will be cared for in the Labor and Delivery Unit. Once stabilized, the patient may be transferred to the Family Care Unit for care. The standard of practice is as follows:

- a. Physical assessment every shift
  - i. Assessment of the patient for duration, amount, color, and consistency of the bleeding.
  - ii. Assessment of the patient for abdominal pain or contractions, uterine rigidity or tenderness.
- b. Notification of the OB physician must occur if there are any changes in the patient's bleeding pattern, signs of shock, or decompensation.
- c. Documentation of peripad weights every 4 hours or more frequently as needed. The nurse should notify the physician immediately for frank red vaginal bleeding.
- d. Documentation of fetal heart tones every 4 hours with vital signs if the patient is not on continuous fetal monitoring.
- e. Documentation of temperature, pulse, respiration, blood pressure, and pain assessment a minimum of every four hours.
- f. Documentation of the patient's intake and output as ordered by the physician.
- g. Strict bedrest unless otherwise ordered by physician.
- h. Placement of a sequential compression device if the patient is on strict bedrest.
- i. Fetal monitoring with hourly strip interpretation as ordered by a physician. Documentation will consist of the fetal heart rate, periodic changes and variability. Documentation of the maternal status shall include frequency, duration and intensity of contractions.

- j. Documentation of fetal and maternal strip interpretation is required in the electronic fetal monitoring system.
- k. Consultation with physiotherapy, within 48 hours of admission, for patients who are ordered strict bedrest.
- l. Completion of a type and screen every 72 hours as ordered by the physician.

### **Educational Requirements**

All Labor and Delivery Unit and Family Care Unit nursing staff caring for antepartum patients will have successfully completed unit orientation and all required unit specific competencies.



Original: 2/14	Attachments: (if required)
Last Reviewed:	
Last Revised:	
Approval Committees & Dates: VP/Chief Operations Officer – VP/Chief Nursing Officer – Hospital President/CEO –	

**References:**

Gilbert. E. (2011). Manual of High Risk Pregnancy and Delivery. 5<sup>th</sup> Ed. Mosby, St. Louis, MO.

Murray. M., Huelsmann. G. (2009). Labor and Delivery Nursing: A guide to evidence based practice. Springer publishing company, New York, NY.

## **Appendix E: CONSULTATION REPORT**

### **Title: Implementing antepartum standards of practice within a Family Care Unit**

---

#### **Background**

In a recent discussion with nursing leadership of the Family Care Unit, I was surprised to find that there was no policy or guidelines that governed the standards of nursing practice for antepartum patients admitted to the Family Care Unit. The Family Care Unit manager and perinatal practice specialist expressed concerns that many nurses were not knowledgeable in the assessment, monitoring guidelines and standards of practice for the antepartum patient. Upon further investigation it was found that there was no policy that guided antepartum standards of practice nor did the staff receive formal education or training on the assessment and documentation requirements when caring for an antepartum patient.

#### **Purpose**

The overall goal for this practicum is to propose the standards of practice for the antepartum patient and plan for implementation in the family care unit. The practicum project will guide antepartum nursing practice for Family Care Unit nurses, facilitate evaluation of nursing practice, provide guidelines for nurse administrators to support and facilitate competent nursing practice, and provide a framework for developing additional nursing standards.

#### **Methods**

In order to ensure that the most current evidenced-based practices were being adopted, consultations were conducted with the following administrative leaders at Bakersfield Memorial Hospital to ensure the organization agreed with the proposed

standards of care and had the opportunity to make any revisions to the policy and implementation plan.

- a) Chief Medical Officer
- b) Family Care Manager
- c) Perinatal Practice Specialist
- d) Obstetrical (OB) Medical Director
- e) Labor and Delivery Manager

Consultations with the Labor and Delivery Manager and with the Chief Nursing Officer were initially planned; however, neither were available for consultation.

Four Family Care Unit staff nurses, two senior and two junior nurses, were consulted to provide feedback on the policy and procedure and implementation plan related to implementation of antepartum standards of practice into the Family Care Unit. These nurses were identified by the Family Care Unit manager as being influential leaders and change agents for the Family Care Unit in previous change management initiatives.

All consultations, except one, was conducted in a private office. Due to scheduling conflicts, the consultation with the Obstetrical Medical Director was completed via telephone. The average duration of each consultation was 20 minutes. The introduction to the consultation and questions used to guide each consultation can be found in Appendix A-B.

The consultations were focused on the implementation plan, policy and procedure, and factors identified in the literature review. Specific goals for leadership consultations were:

1. Seek guidance on navigating the factors that affect implementation of antepartum standards into practice in order to finalize the implementation plan.
2. Seek feedback on the written procedures and approval on the antepartum standard of practice policy and procedure prior to presenting the policy for approval at the Policy and Procedure Committee.
3. Obtain engagement and support of leadership in implementing standards of practice into the Family Care Unit.

Specific goals for the staff consultations were:

1. Seek feedback from staff nurses concerning their perceived need for an antepartum policy and procedure.
2. Seek feedback on perceived factors that will affect implementation of antepartum standards of practice into the Family Care Unit.
3. Seek feedback on strategies that would best facilitate implementation and finalize implementation plan and timeline.
4. Seek feedback on leadership strategies to assist with translating antepartum standards into practice.

## **Results**

### **Need for Antepartum Standards of Practice**

Both consultation groups were asked if they felt that there was a need for antepartum standards of practice within the Family Care Unit. All of the administrators and staff nurses consulted felt that there was a need for antepartum standards of practice. One administrator verbalized that in her opinion the Family Care Unit nurses lacked knowledge in how to assess an antepartum patient and what signs of deterioration in condition to observe for. This administrator admitted that she has brought her concerns to the attention of management about six years ago with no action and was very enthusiastic about finally implementing antepartum standards of practice in the Family Care Unit. Another administrator confirmed that many Family Care Unit nurses lack knowledge concerning antepartum assessment and documentation standards and stated “I have only been in this role for one year but I can tell you that the nurses are practicing very differently when it comes to antepartum patients and this is a potential safety risk for patients and legal risk to our hospital.” This administrator verbalized that there is no formalized education on how to care for antepartum patients and nurses rely on what is taught to them by another nurse.

Another administrator had a different perspective as to why he believed that antepartum standards of practice was needed in the Family Care Unit. The administrator explained that he has worked in OB medicine at Memorial Hospital for over 30 years and caring for antepartum patients has always been a known weaknesses of the Family Care Unit. This administrator admitted that he has not wanted his antepartum patients admitted to the Family Care Unit many times in the past because he felt his patients would be safer and more appropriately cared for in the Labor and Delivery Unit.

All staff nurse consultations confirmed that there is a need for antepartum standards of practice. One nurse was very supportive of implementing antepartum standards of practice in the Family Care Unit and felt that written standards of practice would be great for preceptors to use when they orient new nurses to the Family Care Unit. Another nurse was very passionate during the consultation and stated “often these patients can deteriorate and many nurses lack training on what to assess and document.”

### **Policy and Procedure**

Both consultation groups were asked if they suggested any revisions to the antepartum standards of practice policy and procedure. No changes to the policy and procedure were suggested during the consultation interviews with both groups. One administrator felt that “this policy should have been in place years ago,” and one nurse stated “this policy will be good for our nurses and patients.” This was the general consensus amongst all the administrator and staff nurse consultation interviews.

### **Implementation Plan**

Both consultation groups were asked if they had any revisions to the implementation plan and if they felt that the implementation plan was feasible with regards to available resources and timeline. There were no suggested revisions to the implementation plan and words such as concise, practical, and feasible were used to describe the implementation plan. One administrator felt that the implementation timeline was definitely feasible but suggested to offer multiple educational in-services during day

and evening to reach 100% of staff. This administrator suggested that the implementation date be chosen before the summer months arrive because antepartum admissions increase in the summer and nursing resources get tighter on the Family Care Unit due to vacations.

### **Introducing the Change into Practice**

The staff nurse group were asked their opinion on the best way to introduce new antepartum standards of practice to the nursing staff. All consultation interviews identified that the monthly staff meeting is a good method of communicating new information to the staff. Two out of four nurses felt that nurses will abide by the new practice standards as long as they know the rationale for the change. One nurse identified on-line education through Healthstream as a non-intrusive method of introducing antepartum practice standards to the nursing staff. An administrator did suggest that antepartum standards of practice be introduced slowly and an appropriate amount of education be provided to the nursing staff.

### **Methods of Communication**

The staff nurse group were asked what additional methods of communication (excluding e-mails, department huddles, and staff meetings) could be strategies to distribute information to staff concerning antepartum standards of practice. All staff nurses verbalized the need for educational in-services. One nurse suggested putting the policy and education on Healthstream for all nurses to read and sign off but did admit that nurses do not always completely read the content and may just scroll to the bottom of the policy and sign off that they understand. This nurse also suggested developing a WebEx education session that nurses can participate in from their home. This strategy of communication was also seen as non-intrusive and accommodating to the nurses' personal lives. Another nurse suggested developing a policy reference tool that is posted in the department with the documentation criteria that is listed in the policy. The rationale was that the nurses could easily reference the policy when completing their nursing documentation.

### **Personal vs. Organizational Factors**

Both the administrative and staff nurse consultation groups were asked what they feel were personal and organizational factors that could be barriers or facilitators to implementing antepartum standards of practice in the Family Care Unit. The definitions of personal and organizational barriers had to be reviewed with the two junior staff nurses prior to being able to answer this question. Both barriers and facilitators were identified relating to the person and the organization.

#### **a) Personal Facilitators**

One nurse identified herself as a personal facilitator for change and stated that “as a staff nurse I can be positive about the change and change my practice to be in line with this new policy.” Two administrators felt that there were several nurses who were strong patient advocates and clinical champions within the department and would be willing to help with the education and implementation of antepartum standards of practice. Both administrators believed that these nurses would be influential in changing the practice of other nurses within the department.

Another administrator felt that the OB physicians would be facilitators and drivers for antepartum standards of nursing practice. He believed that the OB physicians “will help enforce the policy standards because this area of nursing has always been an area of concern for the OB physicians.”

#### **b) Personal Barriers**

Four administrators felt that the willingness of the staff to change their practice and abide by the policy is a personal barrier to implementing antepartum standards of practice. One administrator felt that motivating low performers to change their practice is going to be challenging. This administrator stated “It seems that we always have problems with the same nurses and they complain that their workloads are too heavy and they need more staff.” Another administrator echoed the previous administrator and stated “the nursing staff are going to complain about the policy because there is an increase in antepartum monitoring requirements.”

Three nurses discussed the fact that nurses sometimes cannot remember to document all the components that are required of them. One nurse stated “there is a lot to remember to chart for each antepartum condition based on this policy.”

**c) Organizational Facilitators**

One administrator felt that an organizational facilitator to implementing antepartum standards of practice is the organization itself. This administrator felt the organization was very supportive of perinatal safety initiatives and in the past year has adopted five of the national perinatal safety goals. He stated “I am confident that the organization will be supportive of antepartum standards of nursing practice.”

Another administrator felt that the manager was an organizational facilitator to change and needed to hold the nurses accountable for following the antepartum standards of practice policy when it is implemented.

Two nurses felt that the organization could be a facilitator of the change by being flexible with the nurses’ schedule to attend in-services and allow the nurses to complete the education before and after work if this is what the nurse requests.

**d) Organizational Barriers**

Two nurses felt that an organizational barrier to change was the nurses’ 12-hour schedules because all of the nurses in the Family Care Unit work 12-hour shifts and currently staff members are not allowed to attend meetings before or after a shift because the hospital doesn’t like to pay overtime. One nurse felt that a lot of nurses do not like having come in on their days off and have to pay for child care.

One administrator felt that an organizational barrier was the relationship between the Labor and Delivery Unit and Family Care Unit. She stated that “these two departments do not respect each other and do not communicate well.” She also stressed the importance of the Labor and Delivery Unit nursing staff knowing the antepartum standards of practice policy and understanding the standard of care expectations for antepartum patients.



### **Leaders' Involvement**

The staff nurse group were asked how they perceive the leaders' involvement in implementing antepartum standards of practice in the Family Care Unit. All staff nurses agreed that the leader should be visible, discussing the changes with staff in person, monitoring for compliance, and communicating back to the staff what is going well and what needs to be improved upon.

Nurse 1 felt that the leader should be the driver of the change and has to be the one who starts the change and makes sure the staff is educated on the change. Nurse 2 felt that the leader has the responsibility to communicate the new antepartum standards of practice policy to the OB physicians, Family Care Unit, and Labor and Delivery Unit. Nurse 2 stated "I think that it is the leader's responsibility to ensure that practice and policy changes are communicated and followed."

Nurse 3 considered the leader as being the charge nurse, manager, educator, and the director. Nurse 3 felt that it was the responsibility of the charge nurse to remind the nurses who are caring for antepartum patients about the new policy and standards of practice. Both Nurse 3 and Nurse 4 felt that the educator and manager should be responsible for reviewing charts on the floor in real time and talking with the nurses to make sure that they understand what to document; they should also determine if the nurses are compliant with the policy.

### **Staff Engagement**

The staff nurse group were asked about strategies to promote staff engagement in the Family Care Unit around the proposed practice change. All staff nurse consultation interviews verified that just simply talking about the change in person with staff and having meetings with staff will foster staff engagement. Nurse 1 stated "just talk to us, give us time to ask questions and accept the change before it becomes mandatory."

Nurse 3 felt that engagement centers upon the leader's communication and rationale for the change in practice. Nurse 3 stated "I think that the nursing staff will respond better when they are hearing about a change from the leader in person and not through email or huddle."

### **Gaining Support**

The administrative group was asked what past strategies have been effective in gaining physician and nursing support with implementing new standards of practice within the Family Care Unit or other departments. Two administrators felt that it was important to communicate with the nursing and physician staff about the upcoming practice change several weeks in advance so the staff have time to ask questions and hear the rationale for changing their practice.

Two administrators felt that presenting the policy to the obstetrical supervisory committee monthly meeting for OB physicians to review would increase support for implementing antepartum standards of practice.

One administrator suggested that leaders talk about the rationale for implementing antepartum standards of practice policy in staff meetings for a few months before the policy is in place as a strategy to increase support from physicians and nurses.

In conclusion, all consultation interviews confirmed support for the implementation of antepartum standards of practice within the Family Care Unit. Several of the administrators and nurses who participated in the consultation interviews offered to assist with the communication, implementation and monitoring of antepartum standards of practice on the Family Care Unit.

### **Discussion/ Recommendations**

In all consultation interviews it was clear that nurses are influential in changing the practice of other nurses within the Family Care Unit. In addition, the OB physicians

were identified by two administrators as being important change catalysts within the Family Care Unit. As written in the implementation plan, the antepartum standards of practice policy will be presented to the OB supervisory committee for approval and nurse champions will be used to drive the practice change on the unit.

All administrators felt that the willingness of the staff nurses to change their practice and abide by the policy is a personal barrier to implementing antepartum standards of practice. Chart audits, rounding in real time with nurses, coaching, and holding nurses accountable were identified as strategies to increase compliance with antepartum standards of practice. One administrator suggested offering multiple educational in-services during day and evening shifts to reach 100% of the staff. This administrator suggested that the implementation date be chosen before the summer months arrive. This has already been considered and is a part of the implementation plan.

All staff nurse consultation interviews verified that staff engagement is fostered by the leader simply talking about the practice change in person with staff and having staff meetings to introduce the change in practice. Consultation interviews with the nursing staff confirmed the literature review finding that it is vital for the leader to be visible and communicate with staff about the rationale for antepartum standards of practice change as this is a key facilitator to changing practice.

A barrier identified in several nursing consultations concerned the staff nurses' schedules and the difficulty that some nurses have with attending educational in-services on their days off work. It was suggested that the organization needs to accommodate nurses' schedules and allow them to attend educational in-services before and after work and not only on their days off. This was discussed with nursing administration after the consultation interviews were completed, however, this suggestion is not possible at this time due to financial challenges within the organization and creating unequal standards for one department compared to another. It was also suggested during a nurse consultation interview that a WebEx educational session be offered concerning the antepartum practice changes so that staff nurses could participate from home. In a recent discussion with two nursing administrators at Bakersfield Memorial Hospital regarding

WebEx as an educational strategy, they insisted that WebEx is not for the purpose of communicating significant changes in nursing practice or implementing new policies because many nurses sign into WebEx and do not participate in the meeting. As a result, WebEx as an educational strategy will not be included in the implementation plan.

All nursing consultation interviews identified that the monthly staff meeting is an effective method of communicating new practice changes to the nursing staff. However, two nursing consultation interviews identified that a personal barrier that may affect nurses' ability to change their practice is remembering the documentation criteria listed in the policy. In addition to reminding staff of the policy requirements in huddle and staff meetings, it was suggested that the policy be easily accessible in a binder on the unit for charge nurses and staff nurses to refer to when they are assigned to an antepartum patient. This will be added to the implementation plan as a strategy to gain compliance with documentation.

The consultation interviews identified communication and knowledge barriers between nurses in the Family Care Unit and Labor and Delivery Unit. In addition to providing education about antepartum standards of practice to Family Care Unit nurses, it is important to provide education to Labor and Delivery Unit nurses as well. This will be added to the implementation plan.

No further suggestions were given on the antepartum standards of practice policy. However, it was suggested that the policy be placed on Healthstream for nurses to read and sign. This will be added to the implementation plan as an additional education strategy.

### **Conclusion**

The consultations were very important to the practicum project and provided meaningful information in terms of administrator and nursing support for the proposed practice change. The consultations validated the feasibility of the implementation plan and approved the antepartum standards of practice policy prior to its submission for formal institutional approval. The consultation interviews provided suggestions to

strengthen the implementation plan and initiated the process of getting stakeholder engagement and buy-in. Finally, the consultation interviews engaged a team of administrators and nurses who understand the rationale for the proposed practice change, support the change, and are willing to assist during the implementation and monitoring phases of the change.

## **Appendix A: Introduction to Consultation**

The following will be read to individuals prior to starting the consultation interview:

In order to ensure that the most current evidenced-based practices are being adopted, consultations will be conducted with administrative leaders and staff nurses at Bakersfield Memorial Hospital. In order to ensure the organization's key leaders and staff agree with the proposed standards of care, they will be provided with the opportunity to make any revisions or suggestions to the antepartum policy and implementation plan. In addition, the leaders and staff will provide insight into the department's culture, readiness for change, and implementation strategies.

I have taken all reasonable and appropriate efforts to eliminate any confidentiality risks associated with this consultation interview. The summary consultation report will contain only themes identified during the interviews but will not be attributed to individual consultations.

Only titles will be used when analyzing data and developing the consultation report. Written interview notes will be kept secured in a locked drawer in the Director of Nursing's office. The computer that is used to store feedback on policy and procedure and implementation plan will be password protected and used only by myself.

The consultation interview will take 60 minutes and please know that you do not have to answer any questions that you are not comfortable with answering. By giving your verbal agreement to participate in the consultation interview you are agreeing to provide your professional expertise and honesty in answering the consultation questions. Do you have any questions? If not, do you agree with proceeding with the consultation interview?

Thank you for your willingness to participate. Let's proceed with the consultation questions.

## Appendix B: Consultation Questions

**The following questions will guide the consultation meetings with the following administrative leaders at Bakersfield Memorial Hospital.**

- a) Chief Medical Officer
- b) Family Care Manager
- c) Perinatal Practice Specialist
- d) Obstetrical Medical Director
- e) Labor and Delivery Nurse Manager
- f) Chief Nursing Officer

- 
1. Do you feel that there is a need for antepartum standards of practice within the Family Care Unit? Why or why not?
  2. Do you suggest any revisions to the antepartum standards of practice policy and procedure? If yes, what are they and what is the rationale for each change?
  3. What do you think are personal and organizational factors that could be barriers or facilitators to change?
  4. Do you suggest any revisions to the implementation plan? If yes, what are they and what is the rationale for each change?
  5. Do you feel that the implementation plan is feasible with regards to available resources and timeline?
  6. What strategies have been effective in gaining physician and nursing support with implementing new standards of practice within family care or other departments?
  7. Do I have your support in implementing standards of practice within the family care unit?
  8. How do you feel that you can support me in implementing antepartum standards of practice?
- 

**The following questions will guide the consultation meetings with the Family Care Unit nurses:**

- 
1. Do you feel that there is a need for antepartum standards of practice within the Family Care Unit? Why or why not?
  2. Do you have any concerns and questions regarding the antepartum standards of practice policy?
  3. In your opinion, what is the best way to introduce new antepartum practice standards to the nursing staff?
  4. What do you think are personal and organizational factors that could be barriers or facilitators to change?
  5. The literature review clearly demonstrates that support from nursing leaders and administrators is an extremely important in implementing changes into practice.

As a staff nurse, how do you see the leaders' involvement in implementing the antepartum standards of practice in the Family Care Unit?

6. E-mails, department huddles, and staff meetings are strategies to distribute information to staff. What other methods of communication would you suggest during the implementation of antepartum standards of care?
  7. Staff engagement is very important during a practice change. How can I promote staff engagement in the Family Care Unit around this practice change?
  8. Do you have any questions related to the implementation plan?
-



## **Appendix F: Implementation Plan**

The implementation of standards of practice for antepartum patients is going to be a significant practice change for Family Care Unit nurses. The successful implementation of antepartum standards of practice will reduce inappropriate variation in practice, and provide a set of instructions for clinical decision-making to improve patient safety and improve maternal/ fetal outcomes.

A literature search revealed that there are numerous personal and organizational factors that could affect the implementation of antepartum standards of practice. These include issues related to workload, understanding of the change, unit culture, lack of involvement in change, negative expectations, and leadership support. The literature review also identified potential strategies that could be used to address the issues. A summary of the factors and strategies identified in the literature review can be found in the table in Appendix C of the main practicum report.

To prepare for implementation of antepartum standards of practice, it will be necessary to: 1) finalize the policy and procedure, 2) get support from the leadership team, 3) get support from Family Care Unit nursing staff, and 4) educate Family Care Unit staff. The following summarizes specific strategies that will be used. The time line for preparation and implementation can be found in Appendix I of this plan.

6. Finalize the policy and procedure to guide standards of practice for antepartum patients to ensure that the most current evidence-based practices are being adopted.
  - a. Consultations will commence in February 2014 with administrative leaders at Bakersfield Memorial Hospital to ensure the agreement of the organization agrees with the proposed standards of care.
  - b. Hospital leaders will have the opportunity to make revisions to the policy and procedure.
  - c. Once revisions are made, the policy will be submitted to the Policy and Procedure committee for hospital approval.
7. Obtain support from leadership regarding the implementation of antepartum standards of nursing practice.
  - a. Complete consultations with hospital administrators and nursing leaders to involve them in the change and implementation process from the beginning.
  - b. Specific factors to facilitate change will be identified in the consultation sessions.
  - c. Any concerns with the implementation plan can be addressed immediately in order to sustain support and change in practice.
8. Obtain support from Family Care Unit nursing staff regarding the implementation of antepartum standards of nursing practice.

- a. Complete consultations with nursing staff to involve them in the change and implementation process from the beginning.
  - b. Specific factors to facilitate implementation will be identified in the consultation session.
  - c. Any concerns with the implementation plan can be addressed immediately in order to sustain support and change in practice.
9. Ensure that all Family Care Unit nurses and Labor and Delivery Unit nurses are educated in caring for antepartum patients as per the standards of practice.
- a. Each staff nurse will be required to complete a pre-test and policy attestation on Healthstream prior to attending the educational in-service.
  - b. Each staff nurse will be required to attend an in-person in-service which includes a PowerPoint presentation, case study, and post-test.
  - c. There will be assigned antepartum clinical champions.
  - d. To ease documentation, an antepartum documentation form will be developed for both units.
  - e. The policy will be located in the nursing work area for immediate reference.
  - f. Nursing leaders will use multiple methods of communication to assist staff nurses in recalling the standards of practice, applying these standards at the bedside, and demonstrating them in their nursing documentation.  
These include:
    - i. Daily shift huddles

- ii. Monthly Staff Meetings
- iii. Real time rounding
- iv. Audits
- v. Coaching

**Appendix I: Implementation Timeline**

<b>Target Date</b>	<b>Activities</b>
Mid - January to Mid - February	<ul style="list-style-type: none"> <li>• Finalize consultation plan, policy, and implementation plan</li> <li>• Send out invitations for consultations</li> </ul>
Mid - February to Late - March	<ul style="list-style-type: none"> <li>• Conduct consultations with administrative leaders and staff</li> <li>• Submit consultation report</li> <li>• Revise policy based on feedback and send to P&amp;P committee</li> </ul>
Mid – April to Mid May	<ul style="list-style-type: none"> <li>• Revise implementation plan based on feedback</li> <li>• Submit antepartum standards of nursing practice policy and procedure to hospital policy committee</li> <li>• Develop educational materials and plan sessions</li> </ul>
June	<ul style="list-style-type: none"> <li>• Project implementation</li> </ul>