

**WOMEN'S HEALTH AND
PERINATAL NURSING CARE
QUALITY
DRAFT MEASURES
SPECIFICATIONS**

**ASSOCIATION OF WOMEN'S HEALTH, OBSTETRIC AND
NEONATAL NURSES**

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ABOUT AWHONN

Headquartered in Washington, DC, the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) is a leader among the nation's nursing associations, serving more than 24,000 healthcare professionals in the United States, Canada, and abroad and representing more than 350,000 nurses in our specialty.

AWHONN advances the nursing profession by providing nurses with critical information and support to help them deliver the highest quality care for women and newborns. Through its many evidence-based education and practice resources, legislative programs, research, and coalition work with like-minded organizations and associations, AWHONN is firmly established as the standard bearer for women's health, obstetric, and neonatal nurses.

AWHONN members are committed to delivering outstanding health care to women and newborns in hospitals, home health, and ambulatory care settings. As a consequence of the rich diversity of our members' knowledge, skill, expertise and dedication, AWHONN produces resources intended to achieve our mission to promote the health of women and newborns.

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INTRODUCTION

The Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN) 2012 Women’s Health and Perinatal Nursing Care Quality (WHP-NCQ) Measures Advisory Panel developed an introductory set of nursing care quality (NCQ) measures with background information, rationale, and specifications for each measure. These draft NCQ measures (sometimes termed “nurse sensitive” measures) are being shared publicly at this stage in their development (prior to validity and reliability testing) in an effort to stimulate and promote the further development, refinement, and utilization of women’s health and perinatal NCQ measurement in the United States. This is the first published set of draft NCQ measures to specifically address the women’s health and perinatal populations.

More than 350,000 registered nurses provide health care to women and newborns in the United States. Indeed, nurses are the primary providers of bedside care for women and newborns. This is especially true when a woman gives birth in a hospital. The actions of nurses have significant effects, either positive or negative, on patient outcomes. Therefore, measuring nursing care quality is a necessary component of any effort to improve health care provided to women and newborns.

Measuring nursing care quality in the United States is particularly needed now. Currently, the United States is ranked 46th in the world for maternal mortality (World Health Organization, United Nations Children’s Fund, United Nations Population Fund, & World Bank, 2012) and 30th in the world for infant mortality (MacDorman & Mathews, 2009). In addition, maternal morbidity increased by 75% for delivery and 114% for postpartum hospitalizations when comparing 1998-1999 data to 2008-2009 data (Callaghan, Creanga, & Kuklina, 2012).

AWHONN is the standard bearer for nurses who care for women and newborns in the United States. AWHONN’s Board of Directors recognizes and accepts the responsibility of guiding efforts to measure the quality of care nurses provide to women before, during, and after birth and to newborns up to 30 days of life. The development of NCQ measures is one of many steps AWHONN is taking to lead and support efforts to improve the health care provided to women and newborns.

BACKGROUND AND NATIONAL CONTEXT

The Women’s Health and Perinatal Nursing Care Quality Measures panel held its initial meeting in December 2011 and continued to meet regularly throughout 2012 and during the first quarter of 2013. This public review and comment document is a reflection of the work the panel accomplished during that time period. Given the fact that no measures of nursing care quality existed for this population, the first task of the panel was to determine measurement priorities. The panel reviewed the work of other organizations, developed a list of potential topics, prioritized the list, and then worked to specify those measures identified as priority.

AWHONN’s NCQ measure development initiative is designed to be complementary to other national quality measures efforts. Some of the most prominent measurement efforts are outlined below.

National Quality Forum

In the United States, the National Quality Forum (NQF) is the organization responsible for reviewing and endorsing quality measures. To be endorsed by NQF, a measure must meet stringent criteria and undergo a multi-step endorsement process. Nurse sensitive measures have been endorsed by NQF, but these measures have not been tested in a perinatal setting (NQF, 2004). Currently, 14 perinatal and reproductive health measures and one newborn measure are endorsed by NQF (2012a). NQF’s latest report lists recommendations for future measure development (2012b). AWHONN is a member of NQF and actively supports the efforts of NQF. Most of the NQF-endorsed measures are germane to the measurement of NCQ because they track outcomes that are achieved through physician-nurse collaboration. The NQF recommendations relevant to the AWHONN NCQ measures under development are outlined in Table 1.

Table 1: National Quality Forum Recommendations Relevant to the AWHONN Nursing Care Quality Measures under Development

NQF Recommendations	AWHONN NCQ Measure Under Development
Spontaneous labor and birth and lack of unwarranted intervention in low-risk women	02 – 2nd Stage of Labor Mother Directed Spontaneous Pushing 10 – Continuous Labor Support 11 – Some Labor Support 12 – Freedom of Movement during Labor
Breastfeeding - measures to support hospitals using measure 0480 <i>Exclusive Breast Milk Feeding</i>	03 – Skin-to-Skin is Initiated Immediately Following Birth 04 – Duration of Uninterrupted Skin-to-Skin Contact
Rates of exclusive breastfeeding stratified by maternal intention to breastfeed	05 – No Supplementation of Breastfeeding Newborns Without Medical Indication

NQF Recommendations	AWHONN NCQ Measure Under Development
Rates of breastfeeding for infants cared for in neonatal intensive care units (NICUs) stratified by weight groups and gestational age	06 – Ensuring Human Milk As the Primary Diet of Premature Infants in the NICU
Postpartum follow-up – expand NQF-endorsed measure 1517 Prenatal and Postpartum Care to include important care at the postpartum visit such as contraception counseling/reproductive health planning, diabetes follow-up, weight management, breastfeeding support.	09 - Health and Wellness Coordination Throughout the Life Span
Care of very low birth weight (VLBW) infants (<1500 grams and >24 weeks) such as any human milk at discharge	06 – Ensuring Human Milk As the Primary Diet of Premature Infants in the NICU
Measures that are specific to the care that nurses provide	08 – Perinatal Grief Support
Care transitions	01 – Triage of a Pregnant Woman 07 – Initial Contact with Parents Following a Neonatal Transport
Care coordination	09 - Health and Wellness Coordination Throughout the Life Span

From National Quality Forum. (2012). Endorsement summary: Perinatal and reproductive health measures. Washington, DC: Author. Retrieved from http://www.qualityforum.org/Projects/n-r/Perinatal_Care_Endorsement_Maintenance_2011/Perinatal_and_Reproductive_Healthcare_Endorsement_Maintenance_2011.aspx

The Joint Commission

Five of the 14 NQF-endorsed Perinatal and Reproductive Health measures constitute the Joint Commission’s (TJC) Perinatal Care Core Measure Set (2010) (Table 2). In December 2012, TJC announced that the Perinatal Care Core Measure Set was newly designated as one of their accountability measures (TJC, 2012). Given that TJC’s measures are a subset of the NQF measures, they too are germane to measuring NCQ.

American College of Obstetricians and Gynecologists (ACOG), American Medical Association (AMA), and the National Committee for Quality Assurance Physician Consortium for Performance Improvement (AMA-PCPI)

Ten measures are included in the AMA-PCPI measure set that are currently undergoing testing (AMA-PCPI, 2012). Although physicians are coordinating the development of these measures, AWHONN was represented on the Maternity Care Work Group that advised the AMA. Many of the AMA-PCPI measures are germane to measuring NCQ since they measure outcomes involving physician-nurse collaboration.

AWHONN's NCQ measures are intended to be complementary to the NQF, TJC, and AMA-PCPI measures. Table 2 compares the measures in use or under development by these three organizations to each other and to AWHONN's NCQ measures under development.

Table 2: Comparison of Perinatal Quality Measures

National Quality Forum Endorsed Measures	The Joint Commission Perinatal Care Core Measure Set	American Medical Association/ American College of Obstetricians and Gynecologists Physician Consortium for Performance Improvement Measures (Under Development)	Complementary Association of Women's Health, Obstetric and Neonatal Nurses Nursing Care Quality Measures (Under Development)
		Prenatal Care Screening	
		Establishment of Gestational Age	
		Behavioral Health Risk Assessment	
		Body Mass Index Assessment and Recommended Weight Gain Care	
		Care Coordination: Prenatal Record Present at time of Delivery	01-Triage of a Pregnant Woman
0469: PC-01 Elective Delivery	PC-01: Elective Delivery	Elective Delivery Before 39 Weeks	
0471: PC-02 Cesarean Section	PC-02: Cesarean Section	Cesarean Delivery for Low-Risk Nulliparous Women	
		Spontaneous Labor and Birth	02 - 2nd Stage of Labor: Mother Initiated Spontaneous Pushing; 10 – Continuous Labor Support; 11 – Some Labor Support; 12 – Freedom of Movement during Labor
0470: Incidence of Episiotomy		Episiotomy	
0472: Appropriate Prophylactic Antibiotic Received Within Once Hour Prior to Surgical Incision – Cesarean Section			

National Quality Forum Endorsed Measures	The Joint Commission Perinatal Care Core Measure Set	American Medical Association/ American College of Obstetricians and Gynecologists Physician Consortium for Performance Improvement Measures (Under Development)	Complementary Association of Women's Health, Obstetric and Neonatal Nurses Nursing Care Quality Measures (Under Development)
0473: Appropriate DVT Prophylaxis in Women Undergoing Cesarean Delivery			
0475: Hepatitis B Vaccine Coverage Among All Live Newborn Infants Prior to Hospital or Birthing Facility Discharge			
0476: PC-03 Antenatal Steroids	PC-03: Antenatal Steroids		
1746: Intrapartum Antibiotic Prophylaxis for Group B Streptococcus (GBS)			
0477: Under 1500g Infant Not Delivered at Appropriate Level of Care			
0478: Neonatal Blood Stream Infection Rate			
1731: Health Care-Associated Bloodstream Infections in Newborns	PC-04: Health care – Associated Bloodstream Infections in Newborns		
0304: Late Sepsis or Meningitis in Very Low Birth Weight (VLBW) Neonates			

National Quality Forum Endorsed Measures	The Joint Commission Perinatal Care Core Measure Set	American Medical Association/ American College of Obstetricians and Gynecologists Physician Consortium for Performance Improvement Measures (Under Development)	Complementary Association of Women's Health, Obstetric and Neonatal Nurses Nursing Care Quality Measures (Under Development)
0480: PC-05 Exclusive Breast Milk Feeding	PC-05: Exclusive Breast Milk Feeding		03 - Skin-to-Skin is Initiated Immediately Following Birth; 04-Duration of Uninterrupted Skin-to-skin Contact; 05-No Supplementation of Breastfeeding Newborns Without Medical Indication 06-Ensuring Human Milk As the Primary Diet of Premature Infants in the NICU
0483: Proportion of Infants 22 to 29 Weeks Gestation Screened for Retinopathy of Prematurity			
			07-Initial Contact with Parents Following a Neonatal Transport
			08-Perinatal Grief Support
		Post-Partum Follow-up for Depression, Breast Feeding, Glucose Screening for Gestational Diabetes, and Contraceptive Planning	09-Health and Wellness Coordination throughout the Life Span

Note. Additional background information on national perinatal measurement efforts and their relevance to perinatal nursing care can be obtained by viewing AWHONN's webinar entitled Current Developments in Perinatal Quality Measurement: www.awhonn.org/webinars (Item: W-CDPQM-1211).

American Nurses Association's National Database for Nursing Quality Indicators (ANA-NDNQI)

Currently, no measures of women's and perinatal nursing care are included in the NDNQI. AWHONN is working with the ANA and NDNQI to coordinate efforts in the development and reporting of measures for this population.

Centers for Medicare and Medicaid Services (CMS)

Currently, only limited public reporting of CMS-related quality improvement measurement is required for the women's health and perinatal population when compared to the other populations covered by Medicaid or Medicare. However, some recent efforts by CMS are worth noting as positive steps toward improving the quality of care provided to women and newborns. In 2012, CMS formed the Center for Medicaid and CHIP Services (CMCS) Expert Panel on Improving Maternal and Infant Health Outcomes. AWHONN is represented on the panel and is working with CMS and other panel members to develop recommendations for the United States. Also in 2012, CMS announced that all hospitals participating in the Hospital Inpatient Quality Reporting Program must submit data to CMS about their performance on NQF endorsed measure 0469 (TJC Perinatal Care PC-01, see Table 2) the Elective Delivery Measure (US Department of Health and Human Services, 2012). In addition, the Medicare and Medicaid Electronic Health Record (EHR) Incentive Program provides financial incentives for the meaningful use of certified EHR technology to improve patient care. Examples of meaningful use measures relevant to women's health include 307-0014 Prenatal Care: Screening for Human Immunodeficiency Virus (HIV); 307-0014 Prenatal Care: Anti-D Immune Globulin; 309-0032 Cervical Cancer Screening; 310-0033 Chlamydia Screening for Women; and 313-0575 Diabetes Mellitus: Hemoglobin A1c Control. (CMS, 2013).

Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)

Quality measurement development is a dynamic multi-step endeavor. Thus, in addition to the 2012 WHP-NCQ Measures panel, AWHONN is working on numerous initiatives to promote and support the development and implementation of women's health and newborn quality measurements. Four of AWHONN's initiatives are described below.

Assessment and Care of the Late Preterm Infant Implementation Toolkit

Of all infants born prematurely in the United States, more than 70% are late preterm infants (LPIs). Building on the information presented in AWHONN's *Assessment and Care of the Late Preterm Infant Evidence-based Clinical Practice Guideline* (AWHONN, 2010a), the *Assessment and Care of the Late Preterm Infant Implementation Toolkit* (AWHONN, 2013) has been developed to support nurses as they provide evidence-based nursing care to this vulnerable population. The implementation toolkit is designed to help save time, cut administrative and clinical costs, improve patient outcomes, facilitate the transition from the hospital to home for LPIs and their families, and reduce risks associated with

late preterm birth and hospital re-admission rates. The document includes tools to assess risks, provide appropriate care, and track outcomes for late preterm infants. These audit tools will serve as the foundation for the development of LPI-NCQ measures.

Obstetric hemorrhage

AWHONN is working to reduce maternal mortality and morbidity by improving recognition, readiness, and response to obstetric hemorrhage. AWHONN's work focuses on measurement of key quality elements, such as the number of clinicians performing risk assessments, quantification of maternal blood loss, enhancing team preparation with in situ simulation drills, and conducting interdisciplinary team debriefs. The measures developed during this initiative will serve as the foundation for future national measures aimed at reducing obstetric hemorrhage-related maternal mortality and morbidity.

Maternal-Fetal Triage Index

Based on the information gathered during AWHONN's Perinatal Leadership Summits and the data collected by the AWHONN Perinatal Staffing Data Collaborative, AWHONN identified the need for stringent and consistent guidelines concerning the way nurses triage pregnant women and their fetuses when they seek health care. AWHONN's Obstetric Triage Science Team is developing the Maternal-Fetal Triage Index to support training and to monitor nursing care during an obstetric triage. Recommendations for quality improvement audits will be included as a component of the online resources to be released. The audit tools will serve as the foundation for additional obstetric triage NCQ measures development.

Perinatal registered nurse staffing

AWHONN released updated perinatal staffing guidelines for registered nurses in 2010 (AWHONN, 2010b). In 2011 and 2012, AWHONN formed the AWHONN Perinatal Staffing Data Collaborative to collect data and provide detailed staffing reports to leaders who make hospital staffing decisions in the United States. Currently, approximately 170 hospitals are included in the database. In 2013, AWHONN will conduct research to begin to examine the relationship between perinatal nurse staffing and perinatal outcomes.

CONCEPTUAL FRAMEWORKS

The Quality Caring Model (Duffy & Hoskins, 2003) is the theoretical framework that guides AWHONN's work in measuring NCQ (Figure 1). The Quality-Caring Model is used to expose and demonstrate the value of nursing within the evidence-based practice milieu of modern health care (Duffy & Hoskins, 2003). Duffy and Hoskins (2003) explained the core or essence of the work nurses do as caring relationships, specifically human interactions grounded in clinical caring processes. Caring relationships incorporate doing (physical work), being with (interaction) and knowing (relationship). The model underscores the complexity of measuring health care quality; health care is primarily a human-to-human interaction affected by the type of relationships clinicians form with those they care for and with each other.

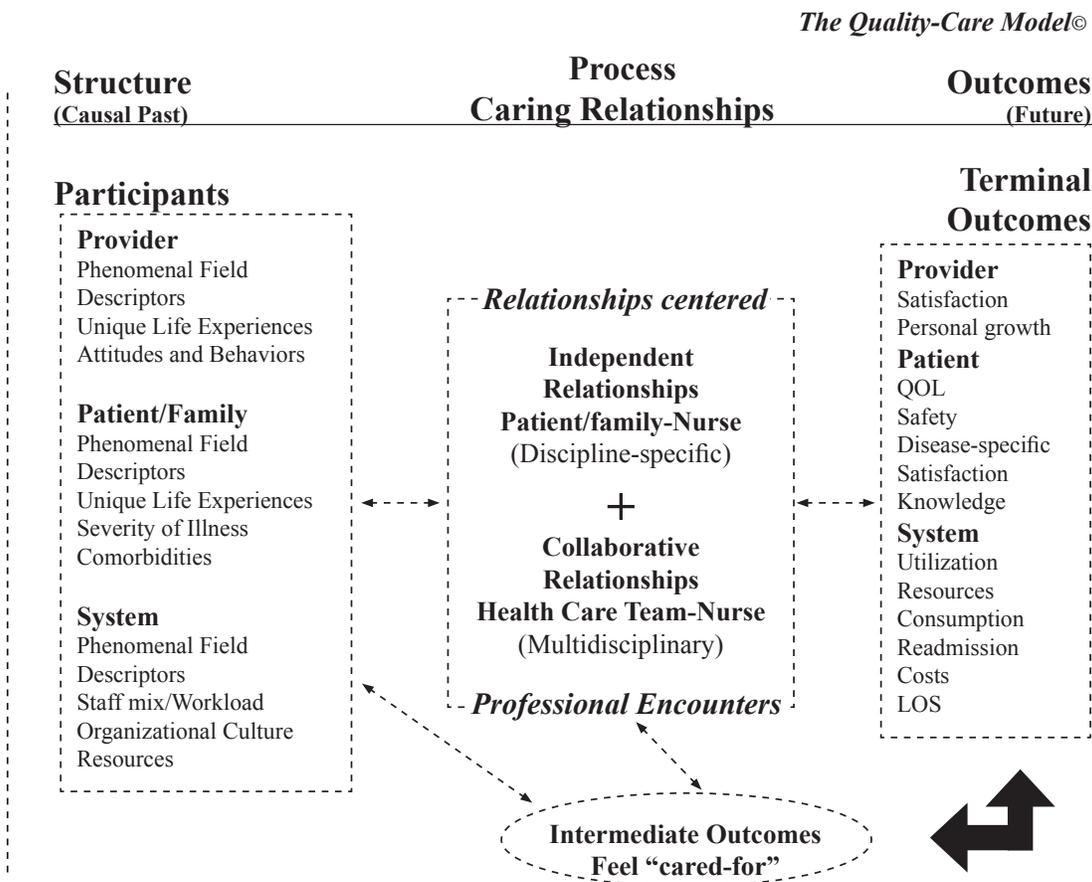


Figure 1. The Quality-Caring Model©.

Figure 1. The Quality-Caring Model©. Adapted from Duffy, J., & Hoskins, L. (2003). The quality caring model: Blending dual paradigms. *Advanced in Nursing Science*, 26, 77. Reprinted with permission.

Two predominant relationships comprise the greater part of nursing's work. *Independent relationships* include those patient/family–nurse interactions that the nurse implements autonomously and is solely held accountable for (nursing discipline-specific). Placing a healthy newborn skin-to-skin with a healthy mother immediately following birth is an example of an independent relationship. *Collaborative relationships* include those activities and responsibilities that nurses share with the healthcare team (multidisciplinary). Titrating the oxytocin infusion according to protocol during labor is an example of a collaborative relationship.

Because nurses work both independently and collaboratively, “their contributions to patient outcomes are simultaneously unique and shared” (Duffy & Hoskins, 2003, p. 83). The role of the nurse is to maintain appropriate balance among these complementary professional relationships while keeping patient needs as a central focus. In so doing, the nurse becomes “the link between the patient, the health care team and the unseen possibilities known as outcomes” (Duffy & Hoskins, 2003, p. 83). The professional nurse's caring relationships foster positive outcomes in patients and families, in members of the health care team, and in the system. The care nurses provide helps people (patients, families and the health care team) feel cared for. Feeling cared for engenders security and a sense of well-being and safety that in turn makes it easier for the individual to learn, change behavior, follow guidelines, and take risks. Positive outcomes follow. *Intermediate outcomes* occur when women's health and perinatal nurses meet the needs of the women they serve, those individuals feel cared for, and the health of women and infants improves. *Future outcomes*, such as patient satisfaction, provider satisfaction, and system stability and capacity (i.e., cost reduction) advance improvement on the policy level. Duffy and Hoskins posited reciprocal interactions between intermediate outcomes and future outcomes. Care becomes safer, more effective, and more efficient (2003).

The Quality-Caring Model dovetails with the Institute of Medicine's (IOM) definition of quality as the level at which health care improves healthy outcomes for individuals and populations in a manner that is consistent with professional knowledge: “Good quality means providing patients with appropriate services in a technically competent manner, with good communication, shared decision making, and cultural sensitivity” (IOM, 2001, p. 232).

The IOM's Six Aims for Improvement include the following:

- Safe – avoiding injuries to patients from the care that is intended to help them.
- Effective – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse).
- Patient-centered – providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.

- Timely – reducing waits and sometimes harmful delays for both those who receive and those who give care.
- Efficient – avoiding waste, in particular waste of equipment, supplies, ideas, and energy.
- Equitable – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socio-economic status (IOM, 2001, pp. 39-40).

PURPOSE OF DEVELOPING NURSING CARE QUALITY MEASURES

Measuring the quality of nursing care is an essential part of measuring the quality of the health care provided because caring relationships embedded in nursing practice are key independent factors affecting outcomes. Rather than remaining in the background (part of the room charge), hard to discern, or invisible, the work of nurses must be brought to the foreground to be assessed and measured with clarity and accountability. The presence and perspective of nurses in the course of surveillance, assessment, and intervention and their ability to mobilize the healthcare team enable them to identify, track, and reduce errors and improve quality of care (National Council of State Boards of Nursing, 2010). McHugh and Stimpfel concluded the following:

The most direct way to evaluate quality is to examine the care process itself. Obtaining information from nurses takes advantage of their unique perspective within the caregiving context. Nurses have insights into aspects of quality... that are not always documented in the medical record but often make the difference between good and bad outcomes (2012, p. 8).

Indeed, it is the attention to improving the processes that affect outcomes that leads to athletes becoming Olympic gold medalists and brings about highly reliable (or high reliability) healthcare organizations. Independent (discipline-specific) nursing practice is primary to quality care; collaborative (multidisciplinary) nursing practice maintains quality care; and a balance between independent and collaborative nursing practice ensures quality care.

AWHONN's NCQ measures are designed primarily to measure the impact of independent, autonomous nursing practice since the current women's health and perinatal quality measures (endorsed by NQF and under development by ACOG/AMA-PCPI) evaluate the impact of collaborative, multidisciplinary nursing practice. AWHONN's NCQ measures will be used to identify the connection between the nurse's care and the patient's outcome and to call attention to the characteristics of the effective and efficient healthcare team.

APPROACH FOR SETTING NCQ MEASUREMENT PRIORITIES

The WHP-NCQ Measures Advisory Panel chose to give priority to the development of quality measures of independent nursing practice. A measure is not change; rather, it is a framework for change, a way to make what is essential and possible a reality. Yet choosing measures and providing the budgetary support necessary to develop them are significant indicators of what a particular organization and the healthcare community value.

Historically, the profession of nursing in America has faced a difficult dichotomy: nurses accepted the duty to care but did not fully recognize their right to establish and define the work of nursing. The consequences of this dichotomy continue, albeit to a lesser degree, even today. Some nurses are challenged to see themselves as independent professionals; some are uninformed about the parameters of their independent practice. Nurses need additional education so that they can recognize the impact of evidenced-based independent nursing practice on the quality of care their patients receive from the healthcare team.

Measures of independent nursing practice will educate nurses about the boundaries of their discipline-specific clinical work so that they can incorporate appropriate evidence-based practice into patient care promptly, without undue deliberation or concern. In addition, increased awareness of their independent care will assist nurses to establish the appropriate balance between autonomous and collaborative practice within each patient encounter.

Measures of independent nursing practice will promote consciousness about the value and significance of nurses providing quality women's health and perinatal care. Currently, many staff nurses and managers do not see quality improvement as relevant or integral to their work. When measures are meaningful, nurses are more likely to buy into the quality improvement endeavor and to gain satisfaction from quality improvement efforts.

Measures of independent nursing practice will increase accountability and motivation to behave professionally. The word profession derives from the Latin *to declare publicly, to promise*. Nurses have promised to care for and attend to the patient's well-being, and that promise necessitates that nurses take responsibility for more than just asking, *Is the patient okay at this moment?* As nurses begin to be held publicly accountable for their actions, as they recognize the significance of their work for women and newborns and experience the public's respect and esteem, nurses will identify, acknowledge and accept a professional as opposed to a *shift-work* point of view.

ADVISORY PANEL RECOMMENDATIONS

The panel has developed specifications for 12 recommended measures. The Institute of Medicine (IOM) has identified six aims for health care improvement: safe, effective (underuse or overuse), patient-centered, timely, efficient, and equitable. Table 3 provides a comparison of how the AWHONN NCQ draft measures relate to these aims.

Table 3: AWHONN’s Nursing Care Quality Draft Measures Compared to the Institute of Medicine’s Six Aims for Improvement

IOM Domains of Health Care Quality		Safe	Effective		Patient-Centered	Timely	Efficient	Equitable
			Underuse	Overuse				
Draft Measures								
01	Triage of a Pregnant Woman	X	X		X	X	X	X
02	2nd Stage of Labor: Mother Initiated Spontaneous Pushing	X	X		X*	X	X	X
03	Skin-to-skin is Initiated Following Birth	X	X		X*	X	X	X
04	Duration of Uninterrupted Skin-to-skin Contact	X	X		X*	X	X	X
05	No Supplementation of Breastfeeding Newborns Without Medical Indication	X	X		X*	X	X	X
06	Ensuring Human Milk As the Primary Diet of Premature Infants in the NICU	X	X		X*	X	X	X

IOM Domains of Health Care Quality		Safe	Effective		Patient-Centered	Timely	Efficient	Equitable
			Underuse	Overuse				
Draft Measures								
07	Initial Contact with Parents Following a Neonatal Transport	X	X		X*	X	X	X
08	Perinatal Grief Support				X		X	
09	Health and Wellness Coordination	X	X		X*	X	X	X
10	Continuous Labor Support	X	X		X*	X	X	X
11	Some Labor Support	X	X		X*	X	X	X
12	Freedom of Movement	X	X		X*	X	X	X

Note. *Patient-centered for both the woman and fetus or infant.

CLINICAL EVIDENCE BASE

AWHONN evidence-based clinical practice guidelines (EBG) provide comprehensive clinical practice recommendations for specific types of patient care. A team of AWHONN member experts undertakes a formal literature search, evaluation, and rating of the relevant literature to provide the best available research evidence about a given topic or issue and to support each guideline recommendation. Essential additions to every maternity and newborn care unit library, AWHONN EBGs synthesize the research evidence related to high quality nursing care in an easy to grasp format. AWHONN EBGs provide the key elements necessary to develop unit- and service-based policies and procedures and provide the framework to implement quality improvement initiatives and measurement. Each EBG includes a Quick Care Guide™ designed for use as a bedside reference and a continuing nursing education component to ensure the availability of ongoing, cost-effective continuing staff development and competence assessment. AWHONN EBGs are instrumental to the development of AWHONN's NCQ measures.

BENCHMARKING AND MEASURE EXCLUSIONS OVERVIEW

Quality measures must remain patient-centered; the needs of the patient must determine the measure's specifications and exclusions. This principle guided the NCQ panel as they developed recommendations for measure specifications. However, it is also necessary that the measures remain realistic and practical. Some of the measures have been limited to include only the pregnant women being cared for by the obstetric team so as to make data collection less burdensome and

benchmarking possible. This is not meant to imply that these measures do not have applicability to the care pregnant women receive in other areas of the hospital. For example, AWHONN's NCQ Measure 01, Triage of a Pregnant Woman, is currently limited to an obstetric service, yet in a hospital where women are regularly triaged in the main emergency department, this measure does have applicability.

There are no benchmarks for the AWHONN NCQ measures under development; it takes many years for benchmarks to be established. But even after benchmarks are established, AWHONN will continue to encourage nurse leaders to strive beyond benchmarks toward making sure that every woman has equal access to the highest quality, evidence-based care. We cannot know what is possible to achieve unless we endeavor to achieve perfection. For example, only a few years ago it seemed impossible for one year to pass without a central line infection on a neonatal intensive care unit (NICU). Yet now hospitals report no such infections for several years

DATA COLLECTION METHODS

The WHP-NCQ Measures Advisory Panel knows that current electronic medical record (EMR) charting programs are not designed to aggregate data in a manner compatible with the AWHONN NCQ measures under development. Until EMRs are modified to capture key components of nursing care, the collection of data for these measures must include a random sample, chart review process. AWHONN is publicly sharing the NCQ measures, with the expectation that EMR systems will be modified to incorporate standard measure specifications, thus easing the burden of data collection by automating the process. AWHONN encourages vendors of EMR systems and hospital leaders to contact AWHONN for permission to incorporate these measures into their EMR systems.

AWHONN's DRAFT NURSING CARE QUALITY MEASURES

See Appendices A-L for each of the proposed NCQ measures, including description, components, importance, definitions, and additional resources.

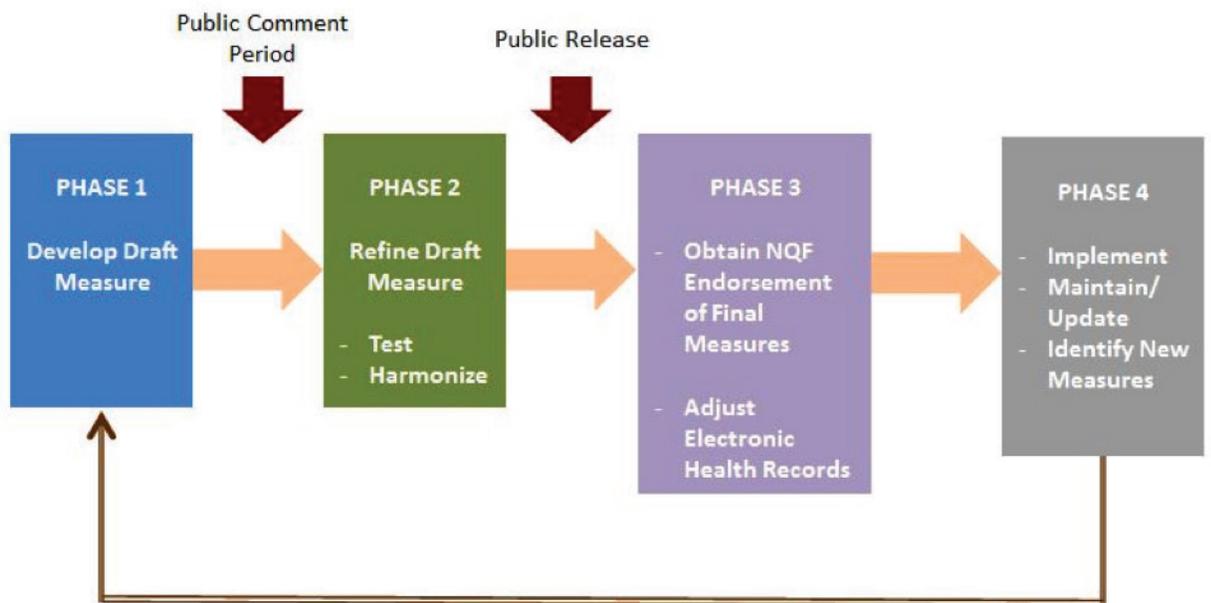
MEASURE HARMONIZATION

Currently, no women's health and perinatal NCQ measures have been endorsed by NQF. Other individuals or organizations who may be working on measures for women's health and perinatal NCQ are encouraged to contact and collaborate with AWHONN to facilitate the development of complementary measures.

NEXT STEPS

The Development of AWHONN's NCQ Measures is a multi-step, multi-year process. The work will occur in four phases, as illustrated in Figure 2.

Figure 2. Development of AWHONN's Nursing Care Quality Measures



CONCLUSION

Currently, the contribution and significance of nursing practice to overall patient outcomes is not well recognized or well documented. AWHONN is confident that this initial set of draft NCQ measures will stimulate additional interest in monitoring and improving the quality of nursing care for women and newborns in the United States.

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Appendix A

Measure 01: Triage of a Pregnant Woman

Description

The triage of a pregnant woman who is 20 weeks or more pregnant is performed thoroughly, systematically, and her disposition determined in a timely manner. Triage of a pregnant woman includes the triage of both the woman and her fetus(es).

The goal is that 100% of pregnant patients presenting to the labor and birth unit with a report of a real or perceived problem or an emergency condition will be triaged by a registered nurse, midwife, or physician within 10 minutes of arrival.

Components

Size of Sample	A random sample chart review of the medical records of women who present to the labor and birth unit with a report of a real or perceived problem or an emergency condition during a one-month period. Minimum of 30 charts are to be reviewed during one month.
Data Collection	Retrospective chart review of 30 charts per month
Numerator Statement	The number of pregnant patients and their fetus(es) presenting to the labor and birth unit for an unscheduled evaluation who were triaged within 10 minutes of arrival, and the triage included chief complaint documentation, maternal vital signs, pain score, pulse oximetry reading, assessment of contractions, measurement of fetal heart rate before, during, and after a contractions (if the woman is having contractions).
Denominator Statement	All pregnant patients presenting to the labor and birth unit for labor or an emergency condition.
Denominator Exceptions	Denominator exceptions include the following: <ol style="list-style-type: none"> 1. The measure pertains only to patients with a known or suspected pregnancy at 20 weeks or greater. 2. Pregnant women presenting for outpatient services will be excluded from the measure. 3. Patients with known fetal demise will be excluded from this measure.

GUIDELINES SUPPORTING PROMPT SCREENING, PRIORITIZATION, AND EMERGENT CARE

Systematic prioritization of how quickly a woman and her fetus are evaluated must be performed in a timely manner whenever a pregnant woman shows up to an obstetric unit unexpectedly.

The Agency for Healthcare Research and Quality (AHRQ) has supported the development and utilization of the Emergency Severity Index (ESI) as a triage tool for emergency care to prioritize the status of non-pregnant patients presenting for care (AHRQ, 2012). The ESI has not been modified or tested in the obstetric population. AWHONN, having identified the need for a more standardized approach to how triage is performed, is developing the Maternal-Fetal Triage Index (MFTI). The MFTI will guide the triage process for pregnant women and her fetus(es). After the woman and her fetus(es) have been triaged they must receive a medical screening exam (evaluation) based on the priority assigned using the MFTI.

The Emergency Medical Treatment and Labor Act (EMTALA) requires that a patient with a condition believed by the patient to be medically emergent presenting to a hospital's labor unit must receive a prompt medical screening exam by a qualified healthcare provider (Austin, 2011). The Perinatal Guidelines reinforce EMTALA precepts and provide specific criteria related to both the qualified medical provider and the medical screening exam for the pregnant patient (American Academy of Pediatrics [AAP] & American College of Obstetricians and Gynecologists [ACOG], 2012). The Joint Commission Sentinel Event Alert Number 44 (2010) addressed maternal death and the need for education regarding the care of the obstetric population. More recently, the National Quality Forum (NQF) established a quality measure (0495) to monitor time elapsed from the patient's arrival for emergency care until a decision is made to admit the patient (NQF, 2008). A similar NQF measure (0496) monitors patient arrival in an emergency department to the discharge time from the emergency department (NQF, 2008). The intense focus of national organizations regarding the timeliness of emergency medical screening and provision of care signifies the need for systematically prioritizing the care of women in need of an emergency evaluation.

LABOR AND BIRTH UNITS AS DESIGNATED EMERGENCY DEPARTMENTS

Emergency services performed in labor and birth units must adhere to national guidelines and standards (Simpson, 2005). Obstetric units must implement guidelines to establish essential time lines and define

Supporting Guidelines & Other References

define the triage process for screening and prioritizing the care of pregnant women who arrive for an unscheduled evaluation (Angelini, 2000). A hospital with a large volume of births may have 1.2 to 1.5 times the overall birth volume present to the obstetric services for a medical screening exam and emergency care (Paisley, Wallace, & Durant, 2011).

NURSING ASSESSMENT AND CARE OF THE MATERNAL FETAL DYAD

The medical screening exam (evaluation) for a pregnant woman requires assessment of both the mother and fetus. Pregnancy produces significant physiologic and anatomic changes in every system of the female body. Evaluation of the pregnant patient and interpretation of diagnostics and plan of care must be based upon knowledge of the changes that occur with the pregnancy (Beaulieu, 2009). The complexity of the physiological and psychosocial implications of pregnancy highlights the necessity of an experienced and knowledgeable clinician to complete the history and physical assessment. Timely, accurate assessment with careful surveillance is critical to quickly identify complications and initiate appropriate interventions (Mahlmeister & Van Mullem, 2000).

Regardless of the complaint, a pregnant woman presenting for emergency care must be assessed and fetal well-being must be documented prior to discharge. Fetal well-being must be confirmed by a reactive non-stress test, normal fetal heart rate tracing characteristics, or a biophysical profile (Angelini, 2000). Failure to accurately assess maternal-fetal status, appropriately treat an indeterminate or abnormal fetal heart tracing, correctly communicate maternal fetal status to the physician/midwife, and respond to or initiate chain of command are common sources of patient harm and obstetric malpractice claims (The Joint Commission [TJC], 2004).

VALUE OF THE NURSING ROLE

Nurses are often the first members of the healthcare team to detect abnormal findings or subtle signs and symptoms of developing complications with the pregnant patient and/or her fetus. Thus, the nursing contribution is crucial to the rescue and mobilization of the team process. Often a role of the nurse is to alert the healthcare team required to meet the needs of the pregnant woman and her fetus. This coordination of the healthcare team has a direct impact on the ultimate outcome for the mother and her newborn (Mahlmeister & Van Mullem, 2000).

Importance

<p>Relationship to Desired Outcome</p>	<p>It is standard practice that patients presenting for emergency care are triaged by a nurse (AHRQ, 2012). The triage process generally involves a systematic, brief clinical nursing assessment that focuses on identification of problems, clinical needs and priority for care. Vitals signs and fetal heart rate auscultation are an integral part of the initial assessment because they are indicators of the severity of illness and the urgency of intervention.</p> <p>A timely and accurate assessment leading to identification of a maternal problem or indeterminate or abnormal fetal heart tracing should trigger assessment by an appropriate provider and improve time to treatment (Angelini & Mahlmeister, 2005). Increased identification and efficient treatment of a maternal or fetal issue should enhance maternal newborn outcomes.</p>
<p>Opportunity for Improvement</p>	<p>In Sentinel Event Alert 44, Preventing Maternal Death, TJC suggested that maternal outcomes could be improved by educating emergency room personnel about the possibility that a woman may be pregnant or may have recently been pregnant. TJC further indicated that knowledge of pregnancy may affect the diagnosis or appropriate treatment (TJC, 2010).</p> <p>To improve neonatal outcomes, in Sentinel Event Alert 30, Preventing Newborn Death and Injury During Delivery, TJC recommended that facilities providing maternal newborn care (2004)</p> <p>Develop clear guidelines for high-risk patients, including nursing protocols for the interpretation of fetal heart tracings.</p> <p>Educate nurses, residents, nurse midwives, and physicians to use standardized communication regarding abnormal fetal heart tracings.</p> <p>Review organization policies regarding the availability of key personnel for emergency intervention.</p> <p>Ensure that designated neonatal resuscitation areas are fully equipped and functioning.</p> <p>Encourage a systematic ongoing evaluation of teamwork and the team response to clinical complications and emergencies to improve and support communication and collaboration between colleagues (Mahlmeister & Van Mullem, 2000).</p>

	<p>RECOMMENDATION</p> <p>Regulations and guidelines for emergent care, including emergent care for obstetric patients, have been established. The value of prompt and accurate triage prioritization is the first step toward prompt and accurate evaluation by a qualified medical provider. To enhance the safety of the maternal fetal dyad, obstetric patients presenting for emergency care should have an initial assessment of both the mother and the fetus(es) using a standardized tool within 10 minutes of the patient’s arrival (Paisley et al., 2011).</p>
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	None
Harmonization with Existing Measures	<p>Two quality measures highlight the significance of measuring the duration of time between the obstetric patient presenting to the perinatal service or emergency department with labor or an emergent condition and the time she is assessed by a qualified medical provider.</p> <ol style="list-style-type: none"> 1. NQF Measure 0496 requires reporting of time that the patient presents to a dedicated Emergency Room for Service until discharge (NQF, 2008). 2. NQF Measure 0495 requires that emergency services report the time lapse from when the patient arrived until the admitted patient leaves the Emergency Department (NQF, 2008).

Designation

Measure Purpose	<ul style="list-style-type: none">- Quality Improvement- Accountability
Type of Measure	<ul style="list-style-type: none">- Volume, Outcome, and Process
Level of Measurement	<ul style="list-style-type: none">- Nurse- Facility-level
Care Setting	<ul style="list-style-type: none">- Hospital (In- and Outpatient status)
Data Source	<ul style="list-style-type: none">- Electronic Health Record (EHR) Data- Administrative Data/Claims (inpatient or outpatient claims)- Paper medical record- EMTALA or Central Log

DEFINITIONS

Triage--is the brief, systematic, maternal and fetal assessment performed when a pregnant woman presents for care that allows for assignment of priority level for care and deployment of personnel and equipment as indicated by the priority level based on the identified clinical needs. Generally, the nurse carries out the triage (AHRQ, 2012). Triage is followed by the complete evaluation of woman and fetus made by the physician; midwife or a registered nurse deemed qualified to be a qualified medical provider (Angelini & Mahlmeister, 2005).

Evaluation--is the complete assessment of maternal and fetal wellbeing, performed by the physician, midwife, or a registered nurse deemed qualified to be a qualified medical provider, which results in a determination of diagnosis, treatment plan and dispensation status (discharge, admission, observation). The medical screening exam is the same as evaluation.

Timing--within 10 minutes of the pregnant woman's arrival in a designated emergency department, an assessment of maternal fetal well-being is to be initiated (Paisley et al., 2011).

Pregnant woman--refers to any woman presenting to a perinatal service or an emergency department for labor or an emergent condition with a known pregnancy.

Perinatal or emergency service--includes any hospital dedicated emergency department open to receive pregnant women with complaint of labor or an emergent condition.

Emergency medical condition (EMTALA)--defines an emergency medical condition as one where a patient presents with acute symptoms (including pain) of sufficient severity that in the absence of immediate medical attention could reasonably be expected to seriously jeopardize the patient's health or body functions, or cause serious dysfunction of anybody organ or part (Austin, 2011).

Qualified medical provider--is defined as a licensed health care provider deemed competent by the medical staff of the organization to complete an emergency assessment (Angelini & Mahlmeister, 2005).

Medical screening exam--The medical exam must reasonably determine whether an emergency medical condition exists, and includes all necessary testing and on-call services within the capability of the hospital to reach a diagnosis that excludes the presence of an emergency medical condition (Austin, 2011).

Perinatal health care provider--the perinatal health care provider may be an obstetrician, family medicine physician, certified nurse midwife, or nurse practitioner.

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Appendix B

Measure 02: Second Stage of Labor: Mother-Initiated, Spontaneous Pushing

Description

Mother-initiated, spontaneous pushing in the second stage of labor begins at the time the patient feels the urge to push. Spontaneous pushing is defined as a mother's response to a natural urge to push or bearing down effort that comes and goes several times during each contraction. It does not involve timed breath holding or counting to 10.

Documentation in the medical record will reflect nursing education to the patient regarding the second stage of labor, patient's report of feeling pressure or the urge to push prior to initiation of active pushing, and evidence of nursing support during the second stage of labor. Nursing support during the second stage of labor will include: support/promotion of mother-initiated pushing and open-glottis pushing, assisting the patient into upright, gravity-neutral positions, and encouraging grunting, groaning, or vocalization during the push in response to contractions.

The goal is 100%.

Components

Size of Sample	Minimum of 30 randomly selected laboring women or all laboring women if population is less than 30.
Data Collection	Concurrent or retrospective chart review.
Numerator Statement	All women with a second stage of labor where documentation in the record provides evidence of mother-initiated, spontaneous pushing.
Denominator Statement	All women without a scheduled cesarean delivery, including women with an epidural.
Denominator Exceptions	Pregnant women whose birth is via planned cesarean delivery. Women who give birth by non-planned cesarean delivery who have not completed the first stage of labor (less than 10cm dilated).

Supporting Guidelines & Other References	<p>“Continuous support during labor from caregivers (nurses, midwives or lay individuals) may have a number of benefits for women and their newborns.... Continuous support during labor has several benefits without any evidence of harmful effects” (American College of Obstetricians and Gynecologists [ACOG], 2003, p. 1449).</p> <p>“Continuously available labor support from a registered nurse (RN) is a critical component to achieve improved birth outcomes...Continuously available labor promotes patient safety, including in the second stage of labor” (Association of Women’s Health, Obstetric and Neonatal Nurses [AWHONN], 2011, p. 665).</p> <p>“The specific goal is provide perinatal registered nurses, certified nurse midwives (CNMs) and Canadian midwives with information necessary to optimize perinatal outcomes by the following means: empowering, preparing and supporting the woman and her family during the second stage of labor; promoting alternative and non-directed pushing techniques based on current evidence; and recognizing, responding to and evaluating the physiologic and psychological processes occurring during the second stage of labor” (AWHONN, 2008, p. 4).</p>
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Importance

Relationship to Desired Outcome	<p>Perinatal nursing care, provided during the second stage of labor affects maternal and neonatal outcomes (AWHONN, 2011).</p> <p>Maternal position in the second stage of labor can have an impact on the natural urge to push. Using a variety of positions helps the mother work with the baby as the baby moves through the pelvis. Upright positions provide the advantage of gravity to help the mother move the baby through the pelvis and gravity-neutral positions may be more relaxing. Upright positions include standing, kneeling and squatting. Gravity-neutral positions include side-lying and hands-knees (Bianchi & Adams, 2009; Romano, & Lothian, 2008).</p> <p>“Proper positioning during second stage of labor enhances the comfort of laboring women and has the ability to promote fetal rotation and descent” (Bianchi & Adams, 2009, p. 45).</p>
Opportunity for Improvement	Provide all laboring women with evidence-based, mother-initiated care during the second stage of labor to optimize perinatal outcomes.

IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	The measure pertains only to women who experience the second stage of labor.
Harmonization with Existing Measures	There are no other measures for the second stage of labor.

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Outcome or Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Hospital – Labor & Delivery
Data Source	<ul style="list-style-type: none"> - Electronic Health Record (EHR) Data - Administrative Data/Claims (inpatient or outpatient claims) - Administrative Data/Claims (multiple-source) - Paper medical record

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Appendix C

Measure 03: Skin-to-Skin is Initiated Immediately Following Birth

Description

Healthy, term newborns should be placed in skin-to-skin contact with their mothers immediately (within the first five minutes of life) following birth. The measure identifies newborns that are placed skin-to-skin at birth.

For stable mothers and healthy, term newborns, the goal is 100% immediate skin-to-skin contact.

Components

Size of Sample	Minimum of 30 randomly selected newborns or all newborns if population is less than 30.
Data Collection	Concurrent or retrospective chart review.
Numerator Statement	Healthy, term newborns (greater than 37 weeks 0 days gestation) that are placed skin-to-skin with their mother immediately at birth.
Denominator Statement	All healthy, term newborns (greater than 37 weeks 0 days gestation) born via vaginal or cesarean birth.
Denominator Exceptions	Mothers who are not alert, responsive, or are unstable following birth. Mothers with a severe illness that prevents them from caring for their infants, e.g., sepsis. Newborns with a diagnosis that requires admission to special care or neonatal intensive care unit at birth.

Supporting Guidelines & Other References	<p>In The Joint Commission (TJC) announced (2012) that the Perinatal Care Core Measure Set was newly designated as one of their accountability measures. Exclusive breast milk feeding is one of the quality measures within the Perinatal Care Core Measure Set. Uninterrupted skin-to-skin during the first two hours of life improves breastfeeding rates.</p> <p>Guidelines and evaluation criteria for the United States Baby-Friendly Hospital Initiative (2012) specify that all mothers should be given their babies to hold in skin-to-skin contact immediately after birth.</p> <p>“The warm chain is a set of ten interlinked procedures carried out at birth and during the following hours and days which will minimize the likelihood of hypothermia in all newborns”(World Health Organization [WHO], 1997, p. 8).</p> <p>Skin-to-skin contact is the third procedure in the warm chain:</p> <p>“Skin-to-skin contact is an effective method of preventing heat loss in newborns, whether they be full term or preterm babies. The mother’s chest or abdomen is the ideal surface to receive the newborn...It can be kept in skin-to-skin contact with the mother while she is being attended to, during transfer to the postnatal ward, and for the first hours after birth” (WHO, 1997, p. 9).</p>
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Importance

Relationship to Desired Outcome	The evidence shows that newborns have better outcomes, including stable temperature, heart rate, respiratory rate, and glucose levels, when they transition to extrauterine life while in skin-to-skin contact with their mothers (Dabrowski, 2007; Galligan, 2006; Hung & Berg, 2011; WHO, 1997). For mothers who choose to breastfeed, evidence shows that skin-to-skin contact at birth is associated with higher rates of exclusive breastfeeding (Dabrowski; Hung & Berg).
Opportunity for Improvement	Perinatal registered nurses (RNs) have the opportunity to advocate for and promote uninterrupted skin-to-skin contact as the optimal environment for stable mothers and newborns.
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	Care of the unstable mother or newborn needs to take priority before skin-to-skin can be initiated.
Harmonization with Existing Measures	Supports guidelines and evaluation criteria for United States Baby-Friendly Hospital Initiative®.

Designation

Measure Purpose	<ul style="list-style-type: none">- Quality Improvement- Accountability
Type of Measure	<ul style="list-style-type: none">- Outcome or Process
Level of Measurement	<ul style="list-style-type: none">- Nurse-level- Group-level- Facility-level
Care Setting	<ul style="list-style-type: none">- Hospital – Labor & Delivery
Data Source	<ul style="list-style-type: none">- Electronic Health Record (EHR) Data- Administrative Data/Claims (inpatient or outpatient claims)- Administrative Data/Claims (multiple-source)- Paper medical record

DEFINITIONS

Skin-to-Skin--is placing the naked newborn baby prone on the mother's bare skin.

Immediate Skin-to-Skin--is the placement of newborns directly on their mother's bare skin at birth (within the first five minutes of life).

REFERENCES

- Dabrowski, G. (2007). Skin-to-skin contact: giving birth back to mothers and babies. *Nursing For Women's Health, 11*(1), 64-71.
- Galligan, M. (2006). Proposed guidelines for skin-to-skin treatment of neonatal hypothermia. *The American Journal of Maternal Child Nursing, 31*(5), 298-306.
- Hung, K. J., & Berg, O. (2011). Early skin-to-skin after cesarean to improve breastfeeding. *The American Journal of Maternal Child Nursing, 36*(5), 318-326.
- The Joint Commission. (2012). Accountability measures. Retrieved from http://www.jointcommission.org/accountability_measures.aspx
- World Health Organization. (1997). *Thermal protection of the newborn: A practical guide*. Geneva, Switzerland: Author.

Appendix D

Measure 04: Duration of Uninterrupted Skin-to-Skin Contact

Description

Uninterrupted and sustained skin-to-skin contact should be maintained for as long as mother and infant can do so or for **at least** 60 minutes immediately after birth. All routine procedures and assessments should be performed while the newborn is skin-to-skin with the mother. Procedures that require separation of the mother and infant, such as bathing and weighing, should be delayed until after the initial period of skin-to-skin contact.

The goal is for 100% of stable mothers and healthy, term newborns to have at least 60 minutes of uninterrupted skin-to-skin contact.

Components

Size of Sample	Minimum of 30 randomly selected newborns or all newborns if population is less than 30.
Data Collection	Concurrent or retrospective chart review.
Numerator Statement	Healthy, term newborns (greater than 37 weeks 0 days gestation) that are provided with sustained and uninterrupted skin-to-skin contact with their mother for at least 60 minutes. Skin-to-skin contact should be initiated within the first 5 minutes of life.
Denominator Statement	All healthy, term newborns (greater than 37 weeks 0 days gestation) born via vaginal or cesarean birth.
Denominator Exceptions	<p>Mothers who are not alert, responsive or are unstable at delivery.</p> <p>Mothers with a severe illness that prevents them from caring for their infants, e.g., sepsis.</p> <p>Newborns with a diagnosis that requires admission to special care or neonatal intensive care unit (NICU) at birth.</p>

Supporting Guideline & Other References	<p>The Joint Commission (TJC) announced (2012) that the Perinatal Care Core Measure Set was newly designated as one of their accountability measures. Exclusive breast milk feeding is one of the quality measures within the Perinatal Care Core Measure Set. Uninterrupted skin-to-skin during the first two hours of life improves breastfeeding rates.</p> <p>Guidelines and evaluation criteria for the United States Baby-Friendly Hospital Initiative (2012) specify that all mothers should be given their babies to hold in skin-to-skin contact immediately after birth.</p> <p>“The warm chain is a set of ten interlinked procedures carried out at birth and during the following hours and days which will minimize the likelihood of hypothermia in all newborns”(World Health Organization [WHO], 2003, p. 8).</p> <p>Skin-to-skin contact is the third procedure in the warm chain:</p> <p>“Skin-to-skin contact is an effective method of preventing heat loss in newborns, whether they be full term or preterm babies. The mother’s chest or abdomen is the ideal surface to receive the newborn...It can be kept in skin-to-skin contact with the mother while she is being attended to, during transfer to the postnatal ward, and for the first hours after birth” (WHO, 1997, p. 9).</p>
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Importance

Relationship to Desired Outcome	The evidence shows that newborns have better outcomes, including stable temperature, heart rate, respiratory rate, and glucose levels, when they transition to extrauterine life while in skin-to-skin contact with their mothers (Dabrowski, 2007; Galligan, 2006; Hung & Berg, 2011; WHO, 1997). For mothers who choose to breastfeed, evidence shows that skin-to-skin contact at birth is associated with higher rates of exclusive breastfeeding (Dabrowski; Hung & Berg).
Opportunity for Improvement	Perinatal registered nurses have the opportunity to advocate for and promote uninterrupted skin-to-skin contact as the optimal environment for stable mothers and newborns.
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-centered, Timely, Efficient, Equitable
Exception Justification	The priority is to provide care to unstable mothers and/or newborns prior to initiating skin-to-skin contact.
Harmonization with Existing Measures	Supports guidelines and evaluation criteria for United States Baby-Friendly Hospital Initiative®.

Designation

Measure Purpose	<ul style="list-style-type: none">- Quality Improvement- Accountability
Type of Measure	<ul style="list-style-type: none">- Outcome or Process
Level of Measurement	<ul style="list-style-type: none">- Nurse-level- Group-level- Facility-level
Care Setting	<ul style="list-style-type: none">- Hospital- Labor & delivery, postpartum, well newborn nursery
Data Source	<ul style="list-style-type: none">- Electronic Health Record (EHR) Data- Administrative Data/Claims (inpatient or outpatient claims)- Administrative Data/Claims (multiple-source)- Paper medical record

DEFINITIONS

Skin-to-skin--is placing the naked newborn baby prone on the mother's bare chest, and covering them with a blanket.

Uninterrupted skin-to-skin--is skin-to-skin contact that is continuous and not stopped for the purpose of providing routine care.

REFERENCES

- Baby-Friendly USA. (2012). Baby-friendly hospital initiative. Retrieved from <http://www.babyfriendlyusa.org>
- Dabrowski, G. (2007). Skin-to-skin contact: giving birth back to mothers and babies. *Nursing For Women's Health*, 11(1), 64-71.
- Galligan, M. (2006). Proposed guidelines for skin-to-skin treatment of neonatal hypothermia. *The American Journal of Maternal Child Nursing*, 31(5), 298-306.
- Hung, K. J., & Berg, O. (2011). Early skin-to-skin after cesarean to improve breastfeeding. *The American Journal of Maternal Child Nursing*, 36(5), 318-326.
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- World Health Organization. (1997). *Thermal protection of the newborn: A practical guide*. Geneva, Switzerland: Author.

Appendix E

Measure 05: No Supplementation of Breastfeeding Newborns without Medical Indication

Description

To reduce the percentage of healthy, term, breastfeeding newborns supplemented with water, glucose water or formula in the first 72 hours following birth without a medical indication to do so.

The goal is 0%.

Components

Size of Sample	Minimum of 30 randomly-selected breastfeeding newborns or all breastfeeding newborns if population is less than 30.
Data Collection	Concurrent or retrospective chart review.
Numerator Statement	Healthy, term (greater than 37weeks 0 days gestation), breastfeeding newborns that are supplemented with water, glucose water or formula in the first 72 hours following birth.
Denominator Statement	Healthy, term, breastfeeding newborns without a medical indication for water, glucose water or formula in the first 72 hours following birth.

Denominator Exceptions	<p>Healthy, term, breastfeeding newborns with a medical indication for supplementation in the first 72 hours following birth.</p> <p>The indications for supplementation in term, healthy infants are few, involving situations where breastfeeding is not possible.</p> <ol style="list-style-type: none"> 1. Separation: maternal illness resulting in separation of mother and baby or mother not at same hospital. 2. Infant with inborn error of metabolism, e.g., galactosemia. 3. Infant who is unable to feed at breast due to congenital malformation or illness. 4. Maternal medications: those contraindicated in breastfeeding (Academy of Breastfeeding Medicine, 2009). <p>There are other possible indications for supplementation in term, healthy infants. In each situation, the physician must decide if the clinical benefits of supplementation outweigh the potential negative consequences of such feedings.</p> <p>Infant indications:</p> <ol style="list-style-type: none"> 1. Asymptomatic hypoglycemia that is unresponsive to appropriate frequent breastfeeding. 2. Clinical and laboratory evidence of significant dehydration (e.g., >10% weight loss, high sodium, poor feeding, lethargy, etc.) that is not improved after skilled assessment and proper management of breastfeeding. 3. Insufficient intake despite adequate milk supply (poor milk transfer). 4. Hyperbilirubinemia associated with starvation where breast milk intake is poor despite appropriate intervention. 5. When macronutrient supplementation is indicated. <p>Maternal indications:</p> <ol style="list-style-type: none"> 1. Breast pathology or prior breast surgery resulting in poor milk production. 2. Intolerable pain during feeding unrelieved by interventions (Academy of Breastfeeding Medicine, 2009).
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Supporting Guidelines & Other References

Increasing the rate of exclusive breastfeeding is imperative.

The World Health Organization and the United Nations Children’s Fund state that maternity and newborn services should “give newborn infants no food or drink other than breast milk unless medically necessary” (Gagnon, Leduc, Waghorn, Yang, & Platt, 2005, p. 397).

“The AAP recommends exclusive breastfeeding for about 6 months, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant, a recommendation concurred to by the WHO and the Institute of Medicine” (American Academy of Pediatrics [AAP], 2012, p. 832).

“Recently, published evidence-based studies have confirmed and quantified the risks of not breastfeeding. Thus, infant feeding should not be considered a lifestyle choice but rather as a basic health issue” (AAP, 2012, p. 837).

“The importance of addressing the issue of the impact of hospital practices and policies on breastfeeding outcomes is highlighted by the decision of The Joint Commission to adopt the rate of exclusive breast milk feeding as a Perinatal Core Measure. As such, the rate of exclusive breastfeeding during the hospital stay has been confirmed as a critical variable when measuring the quality of care provided by a medical facility” (AAP, 2012, p. 835).

Unnecessary in-hospital supplementation ends exclusive breastfeeding

“The first step in reaching this goal [improving breastfeeding exclusivity] is to increase breastfeeding exclusivity in the first few days after birth. It is therefore discouraging that, in our cohort of women receiving WIC, almost 80% of breastfed infants received supplemental formula while in the hospital. Furthermore, 87% of these infants received supplementation that was not medically necessary, according to the ABM criteria” (Tender et al., 2009, p. 15).

“Together with extensive policy and practice support for exclusive breastfeeding, evidence shows that in-hospital formula supplementation affects breastfeeding duration and exclusivity adversely” (Biro, Sutherland, Yelland, Hardy, & Brown, 2011, p. 302).

	<p>“Formula supplementation of breastfed newborns in hospital remains commonplace in developed countries, with prevalence estimates ranging from 6% to 78%” (Biro et al., 2011, p. 302).</p> <p>“In summary, formula supplementation of healthy newborn infants in hospital is commonplace despite widespread recommendations to the contrary” (Gagnon et al., 2005, p. 398).</p>
Importance	
Relationship to Desired Outcome	<p>Early supplementation without medical indication ends exclusive breastfeeding and is unequivocally associated with shorter duration of any breastfeeding.</p> <p>For the short- and long-term health of mothers and infants, health care providers need to endorse exclusive breastfeeding and reject the use of inappropriate, unnecessary supplementation in the first 72 hours following birth.</p>
Opportunity for Improvement	<p>“Improving caregivers’ knowledge about breastfeeding and the medical indications for supplementation as well as implementing supportive hospital practices are important steps in minimizing unnecessary supplementation” (Biro et al., 2011, p. 305).</p> <p>“Formal staff training should not only focus on updating knowledge and techniques for breastfeeding support but also should acknowledge the need to change attitudes and eradicate unsubstantiated beliefs about the supposed equivalency of breastfeeding and commercial infant formula feeding” (AAP, 2012, p. 835).</p> <p>“Supplementation in hospital is largely a nurse’s decision based on characteristics and preferences of the mother, unit practice, and his or her understanding and beliefs about breastfeeding” (Gagnon et al., 2005, p. 398).</p> <p>“Although there is consensus among health professionals that it is rare for a mother to truly have insufficient milk, nurses in this study reported this as a common reason for supplementing” (Gagnon et al., 2005, p. 402).</p> <p>“Modification is likely to be maximized if nurses receive up-to-date information on optimal approaches to deal with breastfeeding problems, assessment of infant behavior as it relates to needs for formula supplementation, and approaches to reduce maternal fatigue and unit policies supporting nonsupplementation” (Gagnon et al., 2005, p. 404).</p>
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable

Exception Justification	Excepting the very few healthy, term breastfeeding newborns with a medical indication for supplementation from the denominator focuses attention on the WHO/UNICEF Ten Steps to Successful Breastfeeding Step 6: maternity and newborn services should “give newborn infants no food or drink other than breast milk, unless medically indicated” (World Health Organization [WHO], 1998, p. 5).
Harmonization with Existing Measures	<p>“The importance of addressing the issue of the impact of hospital practices and policies on breastfeeding outcomes is highlighted by the decision of The Joint Commission to adopt the rate of exclusive breast milk feeding as a Perinatal Care Core Measure. As such, the rate of exclusive breastfeeding during the hospital stay has been confirmed as a critical variable when measuring the quality of care provided by a medical facility” (AAP, 2012, p. 835).</p> <p>The “No Supplementation of Breastfeeding Newborns Without Medical Indication” measure enhances the current “Exclusive Breast Milk Feeding” measure by proposing a specific change in provider behavior that is known to increase the rate of exclusive breastfeeding.</p>

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Outcome or Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Hospital
Data Source	<ul style="list-style-type: none"> - Electronic Health Record (HER) Data - Administrative Data/Claims (inpatient or outpatient claims) - Administrative Data/Claims (multiple-source) - Paper medical record

REFERENCES

- Academy of Breastfeeding Medicine. (2009). ABM clinical protocol #3: Hospital guidelines for the use of supplementary feeding in the healthy term breastfed neonate. *Breastfeeding Medicine*, 4(3), 175-183.
- American Academy of Pediatrics. (2012). Policy statement: Breastfeeding and the use of human milk. *Pediatrics* 129(3), e827-e841.
- Biro, M.A., Sutherland, G.A., Yelland, J.S., Hardy, P., & Brown, S. J. (2011). In-hospital formula supplementation of breastfed babies: A population-based survey. *Birth*, 38(4), 302-310.
- Gagnon, A.J., Leduc, G., Waghorn, K., Yang, H., & Platt, R. W. (2005). In-hospital formula supplementation of healthy breastfeeding newborns. *Journal of Human Lactation*, 21(4), 397-405.
- Tender, J.A., Janakiram, J., Arce, E., Mason, R., Jordan, T., Marsh, J.,...Moon, R. Y. (2009). Reasons for in-hospital formula supplementation in breastfed infants from low-income families. *Journal of Human Lactation*, 25(1), 11-17.
- World Health Organization. (1998). Evidence for the ten steps to successful breastfeeding. Retrieved from http://whqlibdoc.who.int/publications/2004/9241591544_eng.pdf

Appendix F

Measure 06: Ensuring Human Milk as the Primary Diet of Premature Infants in the NICU

Description

Documentation in the medical record will reflect that within six hours post-birth, the mother whose premature newborn admitted to the neonatal intensive care unit (NICU) received a breast pump and the appropriate instruction and support from a registered nurse, and the nurse remained with the mother throughout the first pumping session.

Components of appropriate instruction and support must include the following:

- Providing a hospital-grade, electric, double breast pump
- Correctly fitting the breast pump shields and teaching how to check for continued correct fit
- Giving clear, evidence-based instruction about how often and how long to pump and expected milk volumes
- The nurse remaining with the mother throughout the entirety of her first pumping session lasting approximately 15 minutes

The goal is 100%.

Components

Size of Sample	Minimum of 30 randomly selected mothers whose premature newborn is admitted to the NICU or all of these mothers if population is less than 30.
Data Collection	Concurrent or retrospective chart review.
Numerator Statement	Mothers whose premature (less than 37 weeks 0 days gestation) newborn is admitted to NICU at birth are provided, within 6 hours post-birth, a hospital-grade electric breast pump and instructed on how to use it by a registered nurse who remains with the mother throughout the initial pumping session lasting 15 minutes. This includes mothers who may not have considered the option to breastfeed prior to birth.
Denominator Statement	All mothers whose premature newborns are admitted to the NICU at birth.
Denominator Exceptions	Mothers who are not alert and responsive during the 6 hours post-birth. Mothers with a severe illness that precludes pumping within 6 hours post-birth.

Supporting Guidelines & Other References

“The potent benefits of human milk are such that all preterm infants should receive human milk” (American Academy of Pediatrics [AAP], 2012, p. e831).

“Health care providers should ensure that human milk and breastfeeding are priorities in the NICU” (Spatz, 2012, p. 138).

“There are several significant short-and long-term beneficial effects of feeding preterm infants human milk. Lower rates of sepsis and NEC... fewer hospital readmissions for illness in the year after NICU discharge... lower long-term growth failure and neurodevelopmental disabilities... improved neurodevelopmental outcomes... lower rates of severe retinopathy of prematurity... lower rates of metabolic syndrome... in adolescents, lower blood pressures and low density lipoprotein concentrations and improved leptin and insulin metabolism” (AAP, 2012, p. e831).

“A critical period for high doses of human milk feedings is the first 14 to 28 days post-birth, when several studies have demonstrated a dose-response relationship between the amount of human milk received by VLBW and ELBW infants and specific clinical morbidities including enteral feed intolerance, nosocomial infection, NEC, CLD, ROP, and total number of morbidities during the NICU stay. The mechanism by which the feeding of high doses of human milk impacts morbidities during this critical period is linked to structural and functional changes in the gastrointestinal tract that occur as enteral feedings are advanced” (Meier, Engstrom, Patel, Jegier, & Bruns, 2010, p. 220).

“One of the main factors that impede the use of breast milk for the nutrition of preterm infants is the availability of breast milk” (Kelley, 2012, p. 267).

“An abundant milk volume ensures that the infant has access to exclusive human milk feedings and facilitates the transition to feeding at breast during and after the NICU stay, whereas maternal milk volume problems compromise these goals. Initiating, establishing and maintaining an adequate milk volume is, however, a demanding task for mothers of premature infants. These mothers are breast pump-dependent, meaning that they must rely on the breast pump to replace the sucking stimulation and milk removal functions of a healthy breastfeeding infant. As such, their needs are very different from those of a mother who is an occasional breast pump user, and can depend upon her infant to provide the necessary autocrine stimulus required for milk production” (Meier et al., 2010, p. 227).

	<p>“Numerous factors that are unique to these women, such as an ineffective breast pump, improperly fitting breast shields, infrequent pump use, or ending a pumping session before all of the available milk is removed, can compromise this transition. Similarly, the intense stress, fatigue, and pain in these early days can down-regulate prolactin via the dopaminergic prolactin inhibiting factor” (Meier et al., 2010, p. 228).</p> <p>In order to realize the dose-response benefits of using human milk as the primary diet for premature infants in the NICU, and given the current controversy, expense and other significant challenges related to acquiring donor human milk, nurses must prioritize the initiation, establishment and maintenance of maternal milk volume. For a mother whose premature newborn is admitted to NICU at birth, the nurse must ensure that she receives a breast pump and appropriate instruction and support for its use within 6 hours post-birth (Meier et al., 2010).</p> <p>“The two most significant practice changes that are associated with increased breast milk production in preterm mothers.... The first is to increase the education and support available to the parents of premature infants related to breastfeeding. The second is to increase the healthcare team’s knowledge base regarding the benefits of breast milk for preterm infants and the ways to support the mother while pumping” (Kelley, 2012, p. 271).</p>
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Importance

Relationship to Desired Outcome	In order to realize the dose-response benefits of using human milk as the primary diet for premature infants in the NICU, and given the current controversy, expense and other significant challenges related to acquiring donor human milk, nurses must prioritize the initiation, establishment and maintenance of maternal milk volume.
Opportunity for Improvement	“In the United States, infant mortality could be reduced by 21% if all infants received the recommended 6 months of exclusive human milk feedings” (National Association of Neonatal Nurses [NANN], 2012, p. 57).
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	The rare cases in which a mother is not able to take part in a pumping session are clear exceptions.
Harmonization with Existing Measures	No other measures exist to ensure human milk as primary diet of premature infants in the NICU.

Designation

Measure Purpose	<ul style="list-style-type: none">- Quality Improvement- Accountability
Type of Measure	<ul style="list-style-type: none">- Outcome or Process
Level of Measurement	<ul style="list-style-type: none">- Nurse-level- Group-level- Facility-level
Care Setting	<ul style="list-style-type: none">- Hospital
Data Source	<ul style="list-style-type: none">- Electronic Health Record (EHR) Data- Administrative Data/Claims (inpatient or outpatient claims)- Administrative Data/Claims (multiple-source)- Paper medical record

REFERENCES

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- Meier, P. P., Engstrom, J.L., Patel, A. L., Jegier, B.J., & Bruns, N.E. (2010). Improving the use of human milk during and after the NICU stay. *Clinics of Perinatology*, *37*(1), 217-245.
- National Association of Neonatal Nurses Board of Directors. (2012). Position statement: The use of human milk and breastfeeding in the neonatal intensive care unit. *Advances in Neonatal Care*, *12*(1), 56-60.
- Spatz, D. L. (2012). Innovations in the provision of human milk and breastfeeding for infants requiring intensive care. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, *41*(1), 138-143.

ADDITIONAL RESOURCES

- Ahmed, A. H., & Sands, L. P. (2010). Effect of pre- and post-discharge interventions on breastfeeding outcomes and weight gain among premature infants. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, *39*(1), 53-63.

Appendix G

Measure 07: Initial Contact with Parents Following a Neonatal Transport

Description

The percentage of parents (mother or father) receiving a phone call from the referral hospital NICU nurse within four hours of infant arrival to the referring hospital.

The goal is 100%.

Components

Size of Sample	Minimum of 30 randomly selected infants or all infants if population less than 30.
Data collection	Retrospective chart review or electronic medical record report.
Numerator Statement	<p>Number of infants transported into hospital with communication to parents within four hours of the infant's arrival at referral hospital. Components of the communication should include the following:</p> <ul style="list-style-type: none"> ▪ Time of arrival at the referring hospital. ▪ Status on arrival, update on condition. ▪ What is anticipated to happen (e.g., procedures, tests, monitoring). ▪ Parental questions addressed. Reinforce contact information. Update of maternal status as appropriate. ▪ Inform parents that they may call the unit for an update at any time. ▪ Document discussion that contains all components in the medical record.
Denominator Statement	Total number of infants transported into the hospital.
Denominator Exceptions	Parent is unable to communicate (mother unable to participate due to severe illness, father not available).

Supporting Guidelines & Other References	<p>Although it is preferred that high-risk mothers be transferred during the antepartum period, infants frequently are transferred after birth (Academy of Pediatrics [AAP] & College of Obstetricians and Gynecologists [ACOG], 2012). After the neonatal transfer has occurred, parental communication is imperative. Once the infant arrives at the referring hospital, it is crucial that communication with the parents about the infant's status is completed. Nurses must facilitate this communication (AAP & ACOG, 2012; Karlsen, 2006).</p> <p>Parental stress, particularly maternal stress associated with having an infant admitted to the neonatal intensive care unit has been well documented (Aagaard & Hall, 2008; Docherty, Miles, & Holditch-Davis, 2002; Feely et al., 2008; Jubinville, Newburn-Cook, Hegadoren, & Lacaze-Masmonteil, 2012; Melnyk, Crean, Feinstein, & Fairbanks, 2008; Morey & Gregory, 2012; Pinelli, J., 2000; Schenk & Kelley, 2010).</p> <p>Although there is paucity of studies that address maternal stress as it relates to neonatal transport and separation, it make empirical sense that separation from the infant is one stressor that may be heightened when the infant and mother are separated due to transport.</p> <p>Researchers that have evaluated nursing care, parent communication, or neonatal transport maintain that nurses are positioned to offer therapeutic conversations that would benefit families, especially mothers who are separated from their infants (Hogan & Logan, 2004; Thomas, 2011). Boutilier (2007) described how nurses conduct hand-offs between each other to facilitate a smooth transition. A standard reporting mechanism such as SBAR has been successful in nurse-to-nurse hand-offs. A similar approach should be considered when communicating post-transport to the parent.</p> <p>Communication with parents is a nursing care function that has tremendous impact. This is especially true when the mother and infant are cared for in separate hospitals. This measure documents that important work.</p>
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Importance

Relationship to Desired Outcome	Although there are no randomized controlled studies to support early parental communication, anecdotal information suggests this is a benefit to parents when separated from their infant.
Opportunity for Improvement	Enhance parental communication when infant transferred to an outside facility.
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable

Exception Justification	Phone conversation with parents not achievable.
Harmonization with Existing Measures	No other measure exists for neonatal transport related to communication with parents in neonatal transport.

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Outcome or Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Hospital
Data Source	<ul style="list-style-type: none"> - Electronic Health Record (EHR) Data - Administrative Data/Claims (inpatient or outpatient claims) - Administrative Data/Claims (multiple-source) - Paper medical record

REFERENCES

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Appendix H

Measure 08: Perinatal Grief Support

Description

The percentage women offered support for grief responses during an episode of perinatal loss. Perinatal loss is defined as a fetal or neonatal death occurring in the obstetric and neonatal areas.

The goal is 100%.

Components

Size of Sample	All losses that meet criteria.
Data Collection	Retrospective chart review.
Numerator Statement	<p>Women presenting to an obstetric unit who experience a perinatal loss and are provided bereavement support and end of life care as evidenced by the following:</p> <p>Prior to birth - Develop a plan and identify parental wishes.</p> <ul style="list-style-type: none"> ▪ Provide opportunity to “bond” with infant. <ul style="list-style-type: none"> ○ See /hold infant ○ Name the infant ▪ Provide religious/cultural rituals/ceremonies (e.g., baptism or dedication) and spiritual care and support (e.g., Chaplain). ▪ Plan for resuscitation/withdrawal of support when a live birth that may be incompatible with life is expected. <p>After birth - Develop a plan for aftercare.</p> <ul style="list-style-type: none"> ▪ Create memories. <ul style="list-style-type: none"> ○ Take photo of infant/family as parents desire. ○ Offer for family to hold infant as desired; allow family time alone with infant. ○ Create hand/feet molds and/or prints.

	<ul style="list-style-type: none"> ○ Create a birth announcement. ○ Create a memory box; place mementos such as blanket, hat, tape measure, lock of hair in box. ▪ Arrange of other support services as needed, such as social work or financial counselor. <ul style="list-style-type: none"> ○ Provide anticipatory guidance for discussing loss with family, friends, and community. ○ Provide referral to local or online bereavement support groups. ▪ Provide anticipatory guidance for arrangement for body (according to state laws). <p>Document support measures offered in the medical record.</p>
Denominator Statement	Total number of women presenting to labor and birth unit who experience a perinatal loss.
Denominator Exceptions	<p>Women who refuse supportive services with documentation of refusal in the medical record.</p> <p>Women who die during childbirth.</p>

<p>Supporting Guideline & Other References</p>	<p>The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists (2007) also affirm this need for families experiencing a perinatal loss.</p> <p>The US Department of Health and Human Services published the following guidelines:</p> <ol style="list-style-type: none"> 1. Evidenced based benefits of palliative care programs on patient/family quality of life (2009) 2. Sibling support in end of life care (2011a) 3. Late intrauterine fetal death and stillbirth (2011b) 4. Management of stillbirth (2011c) <p>These guidelines include the need for support for families experiencing loss.</p> <p>Despite the lack of evidence (Flenady & Wilson, 2008), the body of literature suggests that bereavement and end of life support are beneficial (see appendix). The overwhelming consensus is that one aspect of the nurse's role in parental support is that of <i>creating memories</i> as well as emotional support.</p> <p>AWHONN's Perinatal Orientation and Education Program (2009) Module X: Perinatal Loss outlines the provision of holistic nursing care for this population. Spiritual and cultural factors and type of loss affect the emotional response of the family, and unique care is required for the patient. Nurses can play an important role in bereavement support. Supportive care and creating memories are two important elements in this care. This nursing care can and should be measured. Elements of care such as memory boxes and photographs are documented, often on a checklist. Referral to palliative care or even the existence of a palliative care program within an institution can also be measured. Many types of loss occur during a woman's lifetime. Obstetric and neonatal nurses are in the unique position to offer exemplary care for this population. This care can be defined, measured and benchmarked. Doing so would enhance the role of women's health and perinatal nurses.</p>
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Importance

<p>Relationship to Desired Outcome</p>	<p>Although there are few randomized controlled studies to support bereavement support, case studies and expert opinion suggest that such support is beneficial to the emotional well-being of the woman and her family experiencing perinatal loss.</p>
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Opportunity for Improvement	Provide consistent bereavement support for all women.
IOM Domains of Health Care Quality Addressed	Patient-centered; Efficient
Exception Justification	Wishes of the parents need to be respected.
Harmonization with Existing Measures	No other measure exists for perinatal bereavement.

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Outcome or Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Hospital; L&D, Postpartum/Mother-Baby, Neonatal Intensive Care Units
Data Source	<ul style="list-style-type: none"> - Electronic Health Record (EHR) Data - Administrative Data/Claims (inpatient or outpatient claims) - Administrative Data/Claims (multiple-source) - Paper medical record

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Appendix I

Measure 09: Women’s Health and Wellness Coordination throughout the Life Span

Description

To increase the percentage women who are offered annual health and wellness screening in the ambulatory care setting.

The goal is 100%.

Components

Size of Sample	A random sample of women offered annual health and wellness screening. Minimum of 30 charts per facility are to be reviewed.
Data Collection	Retrospective chart or electronic record review.
Numerator Statement	<p>Women offered annual health and wellness screening and education appropriate for life stage and age.</p> <p>Document supports measures offered in the medical record as evidenced by the following:</p> <ul style="list-style-type: none"> ▪ Immunizations by age are up-to-date ▪ Screening exams/ education appropriate for age and life stage documented ▪ See attached recommendations in Table 1.
Denominator Statement	Total number of women greater than or equal to 18 years of age presenting to the ambulatory clinic for a well visit.
Denominator Exceptions	<p>Women less than 18 years old.</p> <p>Women diagnosed with condition prior to screening will be exempt from that screening.</p> <p>Women who are pregnant.</p> <p>Women with problem-oriented healthcare visit.</p>

Supporting Guidelines & Other References

The contribution of registered nurses to women's health and wellness screening and care coordination has been noted by several organizations.

The position statement of the American Nurses Association (2012) outlined the essential role that nurses have in care coordination.

The ANA recognizes and promotes the integral role of registered nurses in the care coordination process to improve care quality and outcomes across patient populations and healthcare settings while stewarding the efficient and effective use of health care resources.

(1) Patient-centered care coordination is a core professional standard and competency for all registered nursing practice. Based on a partnership guided by the healthcare consumer's and family's needs and preferences, the registered nurse is integral to patient care quality, satisfaction, and the effective and efficient use of health care resources. Registered nurses are qualified and educated for the role of care coordination, especially with high risk and vulnerable populations.

(2) In partnership with other healthcare professionals, registered nurses have demonstrated leadership and innovation in the design, implementation, and evaluation of successful team-based care coordination processes and models. The contributions of registered nurses performing care coordination services must be defined, measured and reported to ensure appropriate financial and systemic incentives for the professional care coordination role.

Additionally, the Institute of Medicine (IOM, 2010) recognized the immense contribution nurses have in the nation's healthcare initiatives. Recommendations of the IOM include the following:

- 1) Nurses should practice to the full extent of their education and training.
- 2) Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- 3) Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.

4) Effective workforce planning and policy making require better data collection and an improved information infrastructure.

Recommendations one, three and four support the need for nurses to be engaged in coordination of women's health.

Numerous agencies and organizations have outlined recommendations for women's health screenings and immunization (Agency for Health-care Research and Quality [AHRQ], 2012; American College of Obstetricians and Gynecologists [ACOG], 2010; American Heart Association [AHA], 2012; Association of Reproductive Health Professionals, 2011; Centers for Disease Control and Prevention [CDC], 2012; Family Violence Prevention Fund, 1999; The Joint Commission [TJC], 2008; US Department of Health and Human Services [DHHS], 2012). The 2013 Healthcare Effectiveness Data and Information Set includes several health and wellness measures appropriate for women's health care (National Committee for Quality Assurance [NCQA], 2013). Many of these screenings, such as immunizations and health promotion for the population, can be accomplished independently by nurses.

In 2004, the National Quality Forum (NQF) published nurse sensitive indicators that included areas for standard development:

1. Care of all patient populations, including pediatric, geriatric, and chronically ill patients
2. Care delivered longitudinally (across the continuum), including health promotion/disease prevention and end-of-life care
3. Patient education
4. Coordination and integration of care, including case management
5. Access to and equity of nursing care provided
6. Efficiency of nursing care, including stewardship of resources

Many of these measures are not yet in place. This AWHONN measure addresses several of these areas.

Nurses can and should promote health and wellness in women through consistent screening assessments at well visits.

Importance

Relationship to Desired Outcome	Despite the numerous recommendations, there is no one consolidated measure for women's health and wellness coordination across the life span. The 2012 National Quality Forum Perinatal and Reproductive Health Measures do not include measures that address women outside of pregnancy and postpartum care.
Opportunity for Improvement	Ensure that women have an opportunity for nurse-driven wellness screening and immunizations across the reproductive life span.
IOM Domains of Health Care Quality Addressed	Safe, Effective, Efficient, Patient-centered, Equitable, Timely
Exception Justification	Females less than 18 years of age follow pediatric screening requirements. Women who are in treatment for specific indicator will be exempt from that indicator. Pregnant women are exempt, as they should follow recommendations for pregnancy. Women presenting with a problem will have a limited problem-focused visit rather than a wellness exam and screening.
Harmonization with Existing Measures	No other measure exists for comprehensive women's health in the ambulatory setting.

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Outcome or Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Ambulatory care setting
Data Source	<ul style="list-style-type: none"> - Electronic Health Record (EHR) Data - Administrative Data/Claims (inpatient or outpatient claims) - Administrative Data/Claims (multiple-source) - Paper medical record

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Table 1. Women's Health & Wellness Coordination Throughout the Life Span

Immunizations (CDC, 2012)	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza	One dose annually					
Tetanus, diphtheria, pertussis (Tdap/ TD)	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 years					
Human papillomavirus (HPV)	3 doses					
Zoster						
Measles, Mumps, Rubella (MMR)	Rubella immunity for women of childbearing age should be determined. 1 or 2 doses if lack documentation of vaccination or no evidence of previous infection					
Pneumococcal	1 or 2 doses if risk factors present					1 dose
Meningococcal	1 or more doses if risk factors present					
Hepatitis A	2 doses if risk factors present					
Hepatitis B	3 doses if risk factors present					
Screening & education	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Reproductive health & planning (AHRQ, 2012; Association of Reproductive Health Professionals, 2011)	Contraception, pregnancy planning, peri-menopause (ages >45 years), sexual health. Folic acid supplement for women planning pregnancy or capable of becoming pregnant (AHRQ, 2012).			Menopause, sexual health		
Blood pressure (AHRQ, 2012)	Screen every 2 years with BP < 120/80. Screen every year with SBP of 120-139 mmHg or DBP of 80-90 mmHg.					
Cholesterol (US HHS, 2012) & Lipid Disorder (AHRQ, 2012)	Starting at age 20, test regularly if at increased risk for heart disease (US HHS, 2012).		Ages ≥ 45 years with increased risk heart disease, strongly recommended (AHRQ, 2012).			
Heart health education (weight management, fitness & exercise, diet, risk factors, signs & symptoms MI (US HHS, 2012; AHA, 2012)	Educate all women on prevention of heart disease, risk factors, healthy lifestyle.					
Diabetes (AHRQ, 2012) (excludes pregnancy)	Screen for diabetes in asymptomatic women with sustained BP > 135/80.					
Breast cancer- self exam & mammography (AHRQ, 2012)	Breast self-exam; promote and support breastfeeding					
		Ages 40-49 individualize	Age 50-74 Screen every two years			

Table 1. Women’s Health & Wellness Coordination Throughout the Life Span

Cervical cancer (AHRQ, 2012)	Ages 21- 65 screen with cytology every 3 years					
Colorectal cancer (AHRQ, 2012)	Screen ages 50-75 (fecal occult blood testing, sigmoidoscopy or colonoscopy)					
Screening & education	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Substance use (tobacco, alcohol, prescription and non-prescription drugs, herbs, illegal substances (AHRQ, 2012)	<p>Ask about tobacco use. Provide tobacco cessation interventions to those who use tobacco product. Review all medical and supplement use. Evaluate for signs & symptoms of illicit drug use.</p> <p>Screening strategies appropriate for clinical setting and population.</p>					
Domestic violence (Family Violence Prevention Fund, 1999)	Culturally competent routine screening should be done whether or not symptoms or signs present or provider suspects abuse has occurred.					
Depression and mental health (ACOG, 2010)	Screen for depression during & after pregnancy with appropriate tool (ACOG, 2010).			Any positive finding should prompt appropriate referral to mental health specialist		
	Any positive finding should prompt appropriate referral to mental health specialist					
Osteoporosis (AHRQ, 2012; TJC, 2008)	Education on prevention age related & secondary causes bone loss					Screen ≥ 65
	Women < 65 years with risk; postmenopausal women.					yrs

Appendix J

Measure 10: Continuous Labor Support

Description

The percent of women who receive continuous non-pharmacologic labor support nursing interventions provided by a registered nurse (RN) or by a certified doula who follows the guidance of the RN.

The goal is that 100% of laboring women will receive continuous non-pharmacologic labor support interventions that are customized to meet her physical and emotional needs.

Components

Size of Sample	Minimum of 30 randomly selected women or all women if the population is less than 30.
Data Collection	Randomly selected retrospective chart review.
Numerator Statement	The number of women with spontaneous or induced labor with documentation in the medical record providing evidence of continuous labor support.
Denominator Statement	All women without a scheduled cesarean who are admitted to a labor and birth unit for intrapartum care. Includes women admitted for an induction or augmentation of labor.
Denominator Exceptions	Women who are admitted to a labor and birth unit for reasons other than intrapartum care. Women with a scheduled cesarean.

Supporting Guideline & Other References	<p>“Continuously available labor support from a registered nurse (RN) is a critical component to achieve improved birth outcomes. Continuously available labor support promotes patient safety,” including in the second stage of labor” (Association of Women’s Health, Obstetric and Neonatal Nurses [AWHONN], 2011, p. 665).</p> <p>“Continuous support during labor from caregivers (nurses, midwives or lay individuals) may have a number of benefits for women and their newborns...Continuous support during labor has several benefits without any evidence of harmful effects” (American College of Obstetricians and Gynecologists [ACOG], 2003, p. 1449).</p>
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Importance

Relationship to Desired Outcome	<p>Labor is a dynamic event in a woman’s life; she needs adequate emotional and physical support and comfort to be provided.</p> <p>Non-pharmacologic methods of supporting and comforting women in labor have been shown to be therapeutic and have an impact on women’s experience and birth outcomes (Stark & Jones, 2006).</p> <p>Research suggests that providing comfort and support to laboring women will improve birth outcomes (Hodnett, Gates, Hofmeyr, & Sakala, 2012; Kardong-Edgren, 2001; Thacker & Stroupe, 2000).</p> <p>The number of women who have access to non-pharmacologic labor support interventions provided or supervised by an RN is not known currently.</p> <p>Hodnett et al.’s Cochrane Review of 22 trials (n=15,288 women) showed that women allocated to continuous support were more likely to have</p> <ul style="list-style-type: none"> • A spontaneous vaginal birth (RR 1.08, 95% confidence interval [CI] 1.04 to 1.12) • Shorter labors (MD -0.58 hours, 95% CI -0.85 to -0.31)
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Women were less likely to have

- Intrapartum analgesia (RR 0.90, 95% CI 0.84 to 0.96)
- Report dissatisfaction (RR 0.69, 95% CI 0.59 to 0.79)
- Cesarean (RR 0.78, 95% CI 0.67 to 0.91)
- Instrumental vaginal birth (fixed-effect, RR 0.90, 95% CI 0.85 to 0.96)
- Regional analgesia (RR 0.93, 95% CI 0.88 to 0.99)
- An infant with a low five-minute Apgar score (fixed-effect, RR 0.69, 95% CI 0.50 to 0.95)

The studies in the Cochrane Review addressed continuous support that was provided either by hospital staff (such as nurses or midwives), women who were not hospital employees and had no personal relationship to the laboring woman (such as doulas or women who were provided with a modest amount of guidance), or by companions of the woman's choice from her social network (such as her husband, partner, mother, or friend) (Hodnett et al., 2012).

Continuous support during labor has not been shown to cause harm and has been shown to have benefits for women and infants.

In three work-sampling studies of intrapartum nursing care, researchers found that nurses spent only 6% to 12% of their time providing supportive care and only 11% to 39% of their time providing direct care (Gagnon & Waghorn, 1996; Gale, Fothergill-Bourbonnais, & Chamberlain, 2001; McNiven, Hodnett, & O'Brien-Pallas, 1992).

Current overuse and variation in cesarean rates is associated with variations in clinical practice patterns rather than the characteristics of the women giving birth and women's choices (Kozhimannil, Law, & Virnig, 2013; Main et al., 2006; 2012).

Opportunity for Improvement	<p>It is currently unknown how many women have access to continuous labor support provided or supervised by an RN.</p> <p>Labor support education for RNs, physicians, and midwives.</p> <p>Women with continuous labor support are more likely to report satisfaction with their childbirth experiences (Hodnett et al., 2012).</p>
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	Women with scheduled surgical births are not typically in labor.
Harmonization with Existing Measures	There are no other quality measures for labor support.

Designation

Measure Purpose	<ul style="list-style-type: none"> - Quality Improvement - Accountability
Type of Measure	<ul style="list-style-type: none"> - Process
Level of Measurement	<ul style="list-style-type: none"> - Nurse-level - Group-level - Facility-level
Care Setting	<ul style="list-style-type: none"> - Hospital Labor and Delivery Unit
Data Source	<ul style="list-style-type: none"> - Chart review

DEFINITIONS

Non-Pharmacologic Labor Support—is defined as physical and emotional nursing interventions that support a woman who is in labor to enhance her physical comfort, confidence in her ability to give birth, and sense of being cared for and being safe. A registered nurse or other members of the care team with a license must supervise non-licensed individuals performing labor support interventions, e.g., a doula. Individuals must have evidence-based knowledge concerning how to perform and customize non-pharmacologic labor support interventions. Non-pharmacologic labor support nursing interventions include:

- Being in the room with the woman continuously;
- Encouraging her to labor in positions of her choice, e.g., walking, balance ball;
- Guided imagery and therapeutic breathing;
- Touch therapy such as a back rub, massaging her legs, or applying counter pressure;
- Hydrotherapy either in a tub or shower;
- Warm or cool compresses on various parts of a woman's body;
- Aromatherapy;
- Emotional support such as encouraging the woman verbally, praising her, providing the woman easy to understand information about how labor is progressing and how she and her infant are doing, and reassurance;
- Support the woman's nutritional needs; and
- Advocating for the woman by helping her to articulate her wishes to others.

(Hodnett et al., pg. 7, 2011; Sleutel, 2002; 2003)

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Appendix K

Measure 11: Some Labor Support

Description

The percent of women who receive non-pharmacologic labor support nursing interventions provided by a registered nurse (RN) at least once every hour during intrapartum labor care.

The goal is that 100% of women who do not receive continuous labor support will receive at least one non-pharmacologic labor support nursing intervention customized to her physical and emotional needs provided by an RN every hour for the duration of her intrapartum care.

Components

Size of Sample	Minimum of 30 randomly selected women or all women if population is less than 30.
Data Collection	Randomly selected retrospective chart review.
Numerator Statement	The number of women with spontaneous or induced labor where documentation provides evidence that the woman received at least one non-pharmacologic labor support nursing intervention every hour for the duration of the first stage of labor. Refer to the definition of labor support and technical information on how to calculate the numerator.
Denominator Statement	All women without a scheduled cesarean who are admitted to a labor and birth unit for intrapartum care. Includes women admitted for an induction or augmentation of labor.
Denominator Exceptions	Women who are admitted to a labor and birth unit for reasons other than intrapartum care. Women with a scheduled cesarean.
Supporting Guidelines & Other References	<p>“Continuously available labor support from a registered nurse (RN) is a critical component to achieve improved birth outcomes. Continuously available labor support promotes patient safety. (Association of Women’s Health, Obstetric and Neonatal Nurses [AWHONN], 2011, p. 665).</p> <p>“Continuous support during labor from caregivers (nurses, midwives or lay individuals) may have a number of benefits for women and their newborns....Continuous support during labor has several benefits without any evidence of harmful effects” (American College of Obstetricians and Gynecologists [ACOG], 2003, p. 1449).</p>

Importance

Relationship to Desired Outcome	<p>Labor is a dynamic event in a woman's life; she needs adequate emotional and physical support and comfort to be provided.</p> <p>Non-pharmacologic methods of supporting and comforting women in labor have been shown to be therapeutic and have an impact on the women's experience and birth outcomes (Stark & Jones, 2006).</p> <p>There is research suggests that labor support provided by registered nurses may improve outcomes (Sleutel, 2000; Sleutel, 2003).</p> <p>Research suggests that providing comfort and support to laboring women will improve birth outcomes (Hodnett, Gates, Hofmeyr, & Sakala, 2012; Kardong-Edgren, 2001; Thacker & Stroupe, 2000).</p> <p>The number of women who have access to at least one non-pharmacologic labor support intervention every hour is currently not known.</p> <p>Hodnett et al.'s Cochrane Review of 22 trials (n=15,288 women) showed that women allocated to continuous support were more likely to have</p> <ul style="list-style-type: none">• A spontaneous vaginal birth (RR 1.08, 95% confidence interval [CI] 1.04 to 1.12)• Shorter labors (MD -0.58 hours, 95% CI -0.85 to -0.31) <p>Women were less likely to have</p> <ul style="list-style-type: none">• Intrapartum analgesia (RR 0.90, 95% CI 0.84 to 0.96)• Report dissatisfaction (RR 0.69, 95% CI 0.59 to 0.79)• Cesarean (RR 0.78, 95% CI 0.67 to 0.91)• Instrumental vaginal birth (fixed-effect, RR 0.90, 95% CI 0.85 to 0.96)• Regional analgesia (RR 0.93, 95% CI 0.88 to 0.99)• An infant with a low five-minute Apgar score (fixed-effect, RR 0.69, 95% CI 0.50 to 0.95). <p>The studies in the Cochrane Review addressed continuous support that was provided either by hospital staff (such as nurses or midwives), women who were not hospital employees and had no personal relationship to the laboring woman (such as doulas or women who were provided with a modest amount of guidance), or by companions of the woman's choice from her social network (such as her husband, partner, mother, or friend) (Hodnett et al., 2012).</p>
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	<p>Continuous support during labor has not been shown to cause harm and has been shown to have benefits for women and infants.</p> <p>Researchers in three work-sampling studies of intrapartum nursing care found that nurses spent only 6% to 12% of their time providing supportive care and only 11% to 39% of their time providing direct care (Gagnon & Waghorn, 1996; Gale, Fothergill-Bourbonnais, & Chamberlain, 2001; McNiven, Hodnett, & O'Brien-Pallas, 1992).</p> <p>Current overuse and variation in cesarean rates is associated with variations in clinical practice patterns rather than the characteristics of the women giving birth and women's choices (Kozhimannil, Law, & Virnig, 2013; Main et al., 2006; 2012).</p>
Opportunity for Improvement	<p>It is currently unknown how many women have access to at least one labor support intervention every hour provided by a RN.</p> <p>Labor support education for RNs, physicians, and midwives.</p> <p>Women with continuous labor support are more likely to report satisfaction with their childbirth experience (Hodnett et al., 2012).</p>
IOM Domains of Health Care Quality Addressed	Safe, Effective, Patient-Centered, Timely, Efficient, Equitable
Exception Justification	Women with a scheduled surgical birth are not typically in labor.
Harmonization with Existing Measures	There are no other quality measures for labor support.

Designation

Measure Purpose	- Quality Improvement - Accountability
Type of Measure	- Process
Level of Measurement	- Nurse-level - Group-level - Facility-level
Care Setting	- Hospital Labor and Delivery Unit
Data Source	- Chart review

DEFINITIONS

Non-Pharmacologic Labor Support—is defined as physical and emotional nursing interventions that support a woman who is in labor to enhance her physical comfort, confidence in her ability to give birth, and sense of being cared for and being safe. A Registered Nurse or other members of the care team with a license must supervise non-licensed individuals performing labor support interventions, e.g., a doula. Individuals must have evidence-based knowledge concerning how to perform and customize non-pharmacologic labor support interventions. Non-pharmacologic labor support nursing interventions include:

- Being in the room with the woman;
- Encouraging her to labor in positions of her choice, e.g., walking, balance ball;
- Guided imagery and therapeutic breathing;
- Touch therapy such as a back rub, massaging her legs, or applying counter pressure;
- Hydrotherapy either in a tub or shower;
- Warm or cool compresses on various parts of a woman's body;
- Aromatherapy;
- Emotional support such as encouraging the woman verbally, praising her, providing the woman easy to understand information about how labor is progressing and how she and her baby are doing, and reassurance;
- Support the woman's nutritional needs; and
- Advocating for the woman by helping her to articulate her wishes to others.

(Hodnett et al., pg. 7, 2011; Sleutel, 2002; 2003)

Some Labor Support—is the determination that a woman in labor did or did not receive non-pharmacologic labor support nursing intervention(s) each hour. If she did receive at least one labor support intervention every hour, then record “yes”. If she did not receive at least one labor support intervention every hour, then record “no”. One “no” means that this woman must not be classified as having received some labor support intervention(s) every hour when she was in labor.

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Appendix L

Measure 12: Freedom of Movement during Labor

Description

The percent of women with a full-term pregnancy (greater than 37 weeks and 0 days gestation) who labor in locations other than a bed during intrapartum labor care.

Registered nurses (RN) provide advice, support and encouragement to women so they may be empowered to take advantage of the full range of positioning options when they are in labor. RNs encourage, without limitations, women's access to positions that are restful and comfortable for them.

The goal is that 100% of women will experience freedom of movement during labor.

Components

Size of Sample	At least 50 randomly selected observations of women in the first stage of labor.
Data Collection	Randomly selected times of observation. Be sure to perform observations on both night and day shifts and on all days of the week.
Numerator Statement	The percent of women in the first stage of labor who are laboring in a location other than a bed. For example, women who labor sitting in a rocking chair, on a birthing ball, in a shower, in a tub, or walking. Refer to the definition of freedom of movement and technical information on how to calculate the numerator.
Denominator Statement	All women in the first stage of labor without a scheduled cesarean including women with an epidural.
Denominator Exceptions	All women on therapeutic bed rest due to a medical condition (e.g., preeclampsia, preterm labor). Women in the second stage of labor. Women with a scheduled cesarean.
Supporting Guidelines & Other References	Lamaze International (Shilling, & DiFranco, 2004).

Importance

Relationship to Desired Outcome	<p>Freedom of movement should be an option for women since it is known to enhance the ability of some women to cope with the pain of labor (Shilling & DiFranco, 2004).</p> <p>Using a variety of positions makes it easier for the woman to work with her body and with the fetus as the fetus moves through the pelvis. Upright positions provide the advantage of gravity that assists the mother to move the baby through the pelvis and gravity-neutral positions may be more relaxing. Upright positions include: standing, kneeling and squatting. Gravity-neutral positions include: side-lying and hands-knees. (Bianchi & Adams, 2009; Romano & Lothian, 2008).</p>
Opportunity for Improvement	<p>Most women do not experience freedom of movement when they are in labor. Even women who require continuous fetal monitoring can experience freedom of movement in labor if fetal monitor telemetry is available.</p>
IOM Domains of Health Care Quality Addressed	<p>Safe, Effective, Patient-Centered, Timely, Efficient, Equitable</p>
Exception Justification	<p>Measuring the number of women out of bed during second stage of labor is a separate quality measure. Women in premature labor may need therapeutic bed rest.</p>
Harmonization with Existing Measures	<p>There are no other measures for freedom of movement in labor.</p>

Designation

Measure Purpose	<ul style="list-style-type: none">- Quality Improvement- Accountability
Type of Measure	<ul style="list-style-type: none">- Process
Level of Measurement	<ul style="list-style-type: none">- Nurse-level- Group-level- Facility-level
Care Setting	<ul style="list-style-type: none">- Hospital – Labor & Delivery
Data Source	<ul style="list-style-type: none">- Random Observations

DEFINITIONS

Freedom of Movement During Labor--allows a woman to choose a labor position that is most comfortable for her. Registered Nurses are integral to the process: they suggest alternatives and support a laboring women in choosing positions that are most conducive to her individualized needs and tailored to the stage and phase of labor she is experiencing. Walking, moving around, changing positions in labor, including utilizing positions for rest other than lying on her back and non-bed resting places such as rocking chairs, birthing balls are all important options to facilitate freedom of movement. RNs provide advice, support and encouragement to women so they may be empowered to take advantage of the full range of options when they are in labor, without limitations on their access to positions that are restful and comfortable for them.

Freedom of movement during labor is calculated by randomly selecting different times of the day (include both day and night shifts and all days of the week) when the number of women who are laboring in a location other than a bed are counted and the number of women laboring in a bed are counted. At least 50 randomly selected observations of women in the 1st stage of labor. Add the number of women in labor who were not laboring in bed to those who were laboring in bed to determine the total number of women observed (observe a minimum of 50 women in a month). Divide the number of women laboring in a location other than a bed by the total number of women observed to determine the percent of women who labored out of bed during the observation periods.

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