**NQF #0480 PC-05 Exclusive Breast Milk Feeding**

**NATIONAL QUALITY FORUM**

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the submitting standards web page.

<table>
<thead>
<tr>
<th>NQF #: 0480</th>
<th>NQF Project: Perinatal and Reproductive Health Project</th>
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<tbody>
<tr>
<td>(for Endorsement Maintenance Review)</td>
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<tr>
<td>Original Endorsement Date: Oct 24, 2008</td>
<td>Most Recent Endorsement Date: Oct 24, 2008</td>
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**BRIEF MEASURE INFORMATION**

<table>
<thead>
<tr>
<th>De.1 Measure Title:</th>
<th>PC-05 Exclusive Breast Milk Feeding</th>
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<td>Co.1.1 Measure Steward:</td>
<td>The Joint Commission</td>
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| De.2 Brief Description of Measure: | This measure assesses the number of newborns exclusively fed breast milk feeding during the newborn’s entire hospitalization. This measure is a part of a set of five nationally implemented measures that address perinatal care (PC-01: Elective Delivery, PC-02: Cesarean Section, PC-03: Antenatal Steroids, PC-04: Health Care-Associated Bloodstream Infections in Newborns). |

| 2a1.1 Numerator Statement: | Newborns that were fed breast milk only since birth |

| 2a1.4 Denominator Statement: | Single term liveborn newborns discharged from the hospital with ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for single liveborn newborn as defined in Appendix A, Table 11.20.1 available at: http://manual.jointcommission.org |

| 2a1.8 Denominator Exclusions: | • Admitted to the Neonatal Intensive Care Unit (NICU) at this hospital during the hospitalization |
| | • ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for galactosemia as defined in Appendix A, Table 11.21 |
| | • ICD-9-CM Principal Procedure Code or ICD-9-CM Other Procedure Codes for parenteral infusion as defined in Appendix A, Table 11.22 |
| | • Experienced death |
| | • Length of Stay >120 days |
| | • Enrolled in clinical trials |
| | • Documented Reason for Not Exclusively Feeding Breast Milk |
| | • Patients transferred to another hospital |
| | • ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for premature newborns as defined in Appendix A, Table 11.23 |

| 1.1 Measure Type: | Process |
| 2a1.25-26 Data Source: | Administrative claims, Electronic Clinical Data, Paper Records |
| 2a1.33 Level of Analysis: | Facility, Population : National |

| 1.2-1.4 Is this measure paired with another measure? | No |

| De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed): |

**STAFF NOTES (issues or questions regarding any criteria)**

Comments on Conditions for Consideration:

Is the measure untested? Yes[ ] No[ ] If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5):

5. Similar/related endorsed or submitted measures (check 5.1):

Other Criteria:

Staff Reviewer Name(s):

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**1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT**

Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See guidance on evidence.

Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)

**1a. High Impact: □ H □ M □ L □ I □**

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

De.4 Subject/Topic Areas (Check all the areas that apply): Perinatal

De.5 Cross Cutting Areas (Check all the areas that apply): Patient and Family Engagement, Population Health

**1a.1 Demonstrated High Impact Aspect of Healthcare:** Affects large numbers, Patient/societal consequences of poor quality

**1a.2 If “Other,” please describe:**

**1a.3 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):**

Exclusive breast milk feeding for the first 6 months of neonatal life has long been the expressed goal of World Health Organization (WHO), US Department of Health and Human Services (DHHS), American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG). ACOG reiterated its position in a Committee Opinion on breastfeeding (ACOG, 2007).

Additionally, a Cochrane review of two randomized control trials and 18 other studies substantiates the benefits of exclusive breast milk feeding for the first six months of life (Kramer et al., 2002).

Breastfeeding is associated with decreased risk for many early-life diseases and conditions, including otitis media, respiratory tract infections, atopic dermatitis, gastroenteritis, type 2 diabetes, sudden infant death syndrome, and obesity. Breastfeeding also is associated with health benefits to women, including decreased risk for type 2 diabetes, ovarian cancer, and breast cancer (Ip et al., 2007).

Exclusive breastfeeding is defined as a newborn receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines (WHO, 1991).

In 2007, Healthy People 2010 objectives for breastfeeding initiation and duration included two new objectives on exclusive breastfeeding to increase the proportion of mothers who exclusively breastfeed their infants through age 3 months to 60% and through age 6 months to 25% [objectives 16-19d and 16-19e] (DHHS, 2000). The Healthy People 2020 objectives for exclusive breastfeeding were continued through age 3 months with a goal of 46.2% and age 6 months with a goal of 25.5% [objectives MICH-21.4 and MICH-21.5]. Also included is the related objective MICH-24: increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies (DHHS, 2010).

The Centers for Disease Control and Prevention (CDC) developed a Guide to Breastfeeding Interventions in 2005 for the promotion and support of breastfeeding based on detailed input from the spectrum of breastfeeding experts which can be used to help hospitals achieve the Healthy People 2020 objective MICH-24. Institutional changes i.e., attaining Baby Friendly Hospital Initiative status, individual interventions including increased rooming-in of mothers and newborns, early skin to skin contact and discontinuing policies that are not evidence based have been shown to increase breastfeeding initiation and duration rates as well (Shealy et al., 2007). According to the CDC (2011), mothers who want to breastfeed who do not receive hospital support will stop early. The CDC encourages hospitals to partner with Baby-Friendly hospitals to learn how to improve maternity care, use the CDC’s Maternity Practice in Infant Nutrition and Care (mPINC) survey data to prioritize changes to improve maternity care practices and stop distributing formula samples and give-aways to breastfeeding mothers.

**1a.4 Citations for Evidence of High Impact cited in 1a.3:** • American College of Obstetricians and Gynecologists (ACOG), (Feb. 2007). Committee on Obstetric Practice and Committee on Health Care for Underserved Women. Breastfeeding: Maternal and Infant Aspects. ACOG Committee Opinion 361.
1b. Opportunity for Improvement: H □ M □ L □ I □

(There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:
Increasing the number of newborns who are exclusively fed breast milk for the first six months of life remains a major goal of the WHO, DHHS, AAP and ACOG. Guidelines for the promotion of breast milk feeding are available from the CDC to assist hospitals in establishing successful interventions to improve exclusive breast milk feeding rates in newborns. Breast milk feeding results in numerous health benefits for both mother and newborn. Breastfeeding is associated with decreased risk for many early-life diseases and conditions, including otitis media, respiratory tract infections, atopic dermatitis, gastroenteritis, type 2 diabetes, sudden infant death syndrome, and obesity. Breastfeeding also is associated with health benefits to women, including decreased risk for type 2 diabetes, ovarian cancer, and breast cancer.

The measure will assist health care organizations (HCOs) to track evidence of an increase in the number of newborns who were exclusively fed breast milk during the birth hospitalization.

1b.2 Summary of Data Demonstrating Performance Gap (Variation or overall less than optimal performance across providers):

For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included

In 2007, the CDC analyzed data from the National Immunization Survey (NIS). The report indicated that even though rates for breastfeeding initiation and duration increased among infants born during 2000-2004, rates for exclusive breastfeeding through ages 3 months and 6 months among infants born in 2004 were 30.5% and 11.3%, respectively, below targets set by Healthy People 2010 (CDC, 2007). These rates are still below the new targets set by Healthy People 2020 (DHHS, 2010).

Based on 4 quarters of data reported to The Joint Commission, PC-05 has an aggregate performance rate of 41.5%, indicating a potential performance gap of 33.5% based on the Healthy People 2010 goal of 75% of mothers breastfeeding at hospital discharge.

1b.3 Citations for Data on Performance Gap:

For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included

- The Joint Commission, unpublished data, 2011.

1b.4 Summary of Data on Disparities by Population Group:

For Maintenance – Descriptive statistics for performance results for this measure by population group

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
A study was conducted by Petrova et al. (2007) to identify the association between the in-hospital feeding pattern and the infant’s post discharge feeding modality during the first month of life in a culturally diverse population of women. Demographic, clinical, and feeding practice data were collected from the medical charts and interviews of mothers conducted in the first month after singleton delivery of healthy term newborns. Among the 307 mothers who completed the study, exclusive in-hospital breast milk feeding was reported by 54.2% of white, 38.7% of black, 54.0% of asian, and 44.7% of hispanic (p = 0.063), and among these, only 55.6%, 50.0%, 58.9%, and 19.1%, respectively, maintained exclusive breast milk feeding during the first postpartum month (p < 0.02). The rate of exclusive breast milk feeding at the end of the first month was 10.5%, 15.8%, 20.7%, and 3.9%, respectively, for the white, black, asian, and hispanic mothers whose infants received partial or no breastfeeding in-hospital. Overall, the logistic regression analysis showed significant association between initiation of exclusive breast milk feeding in-hospital and exclusive breast milk feeding at the end of the first month (odds ratio 7.2 and 95% confidence interval 4.0, 12.6). In conclusion, it showed a larger decline in the continuation of exclusive breast milk feeding and the lowest rate of exclusive breast milk feeding at 1 month in the hispanic mothers. Irrespective of race/ethnicity, mothers who practice exclusive breast milk feeding in-hospital are more likely to exclusively fed breast milk throughout the neonatal period.

According to the CDC, from 2000-2004 the rates of exclusive breastfeeding were significantly lower among black infants (compared with white infants) and infants born to unmarried mothers (compared with married mothers). Additionally, older age, urban residence, higher education, and higher income of mothers all were positively associated with exclusive breast milk feeding (CDC, 2007).

1b.5 Citations for Data on Disparities Cited in 1b.4: [For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)
Is the measure focus a health outcome? Yes No  If not a health outcome, rate the body of evidence.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Quality</th>
<th>Consistency</th>
<th>Does the measure pass subcriterion 1c?</th>
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<tbody>
<tr>
<td>M-H</td>
<td>M-H</td>
<td>M-H</td>
<td>Yes</td>
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<tr>
<td>L</td>
<td>M-H</td>
<td>M</td>
<td>IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No</td>
</tr>
<tr>
<td>M-H</td>
<td>L</td>
<td>M-H</td>
<td>Yes if potential benefits to patients clearly outweigh potential harms: otherwise No</td>
</tr>
<tr>
<td>L-M-H</td>
<td>L-M-H</td>
<td>L</td>
<td>No</td>
</tr>
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Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service

Does the measure pass subcriterion 1c?

Yes  IF rationale supports relationship
1c.4 Directness of Evidence to the Specified Measure (State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population):
The central topic for the measure is promotion of exclusive breast milk feeding of the newborn during the entire birth hospitalization. The evidence shows numerous health benefits for both mothers and newborns. The target population for the performance measure is consistent with the body of evidence supporting the need for improving exclusive breast milk feeding rates.

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): 1c.5. Quantity of Studies in the Body of Evidence (Total number of studies, not articles)
The body of literature examining breast feeding with neonatal outcomes is very large with over 27,000 articles published since 1980. 900 studies examine outcomes from breast-feeding with reductions in asthma, diarrheal illness, and childhood obesity being the most important health benefits. Exclusive breast-feeding in the first weeks was the single most important factor. Over 100 studies have examined initial breast feeding as a quality measure. A separate but related evidence base is the World Health Organization and United Nations Children’s Fund (UNICEF) Baby-Friendly Hospital Initiative that specifies Ten Steps to Successful Breastfeeding which identifies hospital practices that impair exclusive breast-feeding (over 200 separate studies).

1c.6 Quality of Body of Evidence (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): The quality of evidence supporting the promotion and support of exclusive breast milk feeding is quite high with studies published that have involved mother and newborn couplets. As noted numerous RCTs have been conducted over the past decades demonstrating improved health benefits for both mother and newborn. Some of the improved health benefits for newborns include: otitis media risk reduction by 23% (95% CI 9% to 36%), respiratory tract infections risk reduction by 72% (95% CI 46% to 86%), atopic dermatitis risk reduction by 42% (95% CI 8% to 59%), gastroenteritis risk reduction by 64% (95% CI 26% to 82%), type 2 diabetes risk reduction by 39 percent (95% CI 15% to 56%), sudden infant death syndrome risk reduction by 36 percent (95% CI 19% to 49%), and obesity risk reduction in two studies by 7- 24% (95% CI 14% to 33% and 95% CI 1% to 12%)
No study design flaws were identified during the literature review.

1c.7 Consistency of Results across Studies (Summarize the consistency of the magnitude and direction of the effect): Studies spanning the past five decades have consistently demonstrated the health benefits of breast milk feeding for both mother and newborn. Again, some of the improved health benefits for newborns include: otitis media risk reduction by 23% (95% CI 9% to 36%), respiratory tract infections risk reduction by 72% (95% CI 46% to 86%), atopic dermatitis risk reduction by 42% (95% CI 8% to 59%), gastroenteritis risk reduction by 64% (95% CI 26% to 82%), type 2 diabetes risk reduction by 39 percent (95% CI 15% to 56%), sudden infant death syndrome risk reduction by 36 percent (95% CI 19% to 49%), and obesity risk reduction in two studies by 7- 24% (95% CI 14% to 33% and 95% CI 1% to 12%)

1c.8 Net Benefit (Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms):
As described before, there are no known harms to patients associated with exclusive breast milk feeding. There are numerous studies documenting health benefits to both newborn and mother; therefore, the benefits of this recommended practice outweigh the harms.

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? No

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:

1c.11 System Used for Grading the Body of Evidence: Other

1c.12 If other, identify and describe the grading scale with definitions: Although grading of the evidence was not determined during our systematic review, it was determined that the guideline developers accounted for a balanced representation of information, looked beyond one specialty group or discipline, and provided information that was accessible and met the requirements set out in this measure maintenance form.
1c.13 Grade Assigned to the Body of Evidence: Not Applicable

1c.14 Summary of Controversy/Contradictory Evidence: There is no documented evidence regarding controversy about the benefits of exclusive breast milk feeding for mother and newborn.

1c.15 Citations for Evidence other than Guidelines (Guidelines addressed below):


1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):
The following major recommendations are included in the Academy of Breastfeeding Medicine Protocol # 7 on pages 173-177:

Policy Statements
1. The "name of institution" staff will actively support breastfeeding as the preferred method of providing nutrition to infants. A multidisciplinary, culturally appropriate team comprising hospital administrators, physician and nursing staff, lactation consultants and specialists, nutrition staff, other appropriate staff, and parents shall be established and maintained to identify and eliminate institutional barriers to breastfeeding. On a yearly basis, this group will compile and evaluate data relevant to breastfeeding support services and formulate a plan of action to implement needed changes. (III)
2. A written breastfeeding policy will be developed and communicated to all health care staff. The "name of institution" breastfeeding policy will be reviewed and updated biannually using current research as an evidence-based guide. (III)
3. All pregnant women and their support people as appropriate will be provided with information on breastfeeding and counseled on the benefits of breastfeeding, contraindications to breastfeeding, and risk of formula feeding (Academy of Breastfeeding Medicine Protocol Committee, "Clinical protocol #19," 2009). (II-1, II-2, III)
4. The woman's desire to breastfeed will be documented in her medical record. (III)
5. Mothers will be encouraged to exclusively breastfeed unless medically contraindicated. The method of feeding will be documented in the medical record of every infant. (Exclusive breastfeeding is defined as providing breast milk as the sole source of nutrition.) Exclusively breastfed babies receive no other liquids or solids, with the exception of oral medications prescribed by a medical care provider for the infant.) (II-1, II-2, III)
6. At birth or soon thereafter all newborns, if baby and mother are stable, will be placed skin-to-skin with the mother. Skin-to-skin contact involves placing the naked baby prone on the mother's bare chest. The infant and mother can then be dried and remain together in this position with warm blankets covering them as appropriate. Mother–infant couples will be given the opportunity to initiate breastfeeding within 1 hour of birth. Post-cesarean-birth babies will be encouraged to breastfeed as soon as possible, potentially in the operating room or recovery area (see Table 1 in the original guideline document). The administration of vitamin K and prophylactic antibiotics to prevent ophthalmia neonatorum should be delayed for the first hour after birth to allow uninterrupted mother–infant contact and breastfeeding (Academy of Breastfeeding Medicine Protocol Committee, "ABM clinical protocol #3," 2009; Mikiel-Kostyra, Mazur, & Boltruszko, 2002; Richard & Alade, 1990). (II-1)
7. Breastfeeding mother–infant couples will be encouraged to remain together throughout their hospital stay, including at night (rooming-in). Skin-to-skin contact will be encouraged as much as possible. (II-1)
8. Breastfeeding assessment, teaching, and documentation will be done on each shift and whenever possible with each staff contact with the mother. Each feeding will be documented, including latch, position, and any problems encountered, in the infant’s medical record. For feedings not directly observed, maternal report may be used. Every shift, a direct observation of the baby’s position and latch-on during feeding will be performed and documented. (II-1, II-2, III)

9. Mothers will be encouraged to utilize available breastfeeding resources including classes, written materials, and video presentations, as appropriate. If clinically indicated, the healthcare professional or nurse will make a referral to a lactation consultant or specialist for additional education or assistance. (II-1, II-2, III)

10. Breastfeeding mothers will be instructed about:
   a. Proper positioning and latch on
   b. Nutritive suckling and swallowing
   c. Milk production and release
   d. Frequency of feeding/feeding cues
   e. Hand expression of breast milk and use of a pump if indicated
   f. How to assess if infant is adequately nourished
   g. Reasons for contacting the healthcare professional

These skills will be taught to primiparous and multiparous women, provided in written form (Eidelman, Hoffmann, & Kaitz, 1993), and reviewed before the mother goes home. (II-1, II-2, III)

11. Parents will be taught that breastfeeding infants, including cesarean-birth babies, should be put to breast at least 8 to 12 times each 24 hours, with some infants needing to be fed more frequently. Infant feeding cues (e.g., increased alertness or activity, mouthing, or rooting) will be used as indicators of the baby’s readiness for feeding. Breastfeeding babies will be breastfed at night. (II-1, II-2, III)

12. Time limits for breastfeeding on each side will be avoided. Infants can be offered both breasts at each feeding but may be interested in feeding only on one side at a feeding during the early days. (II-1, II-2, III)

13. No supplemental water, glucose water, or formula will be given unless specifically ordered by a healthcare professional (e.g., physician, certified nurse midwife, or nurse practitioner) or by the mother’s documented and informed request. Prior to non-medically indicated supplementation, mothers will be informed of the risks of supplementing. The supplement should be fed to the baby by cup if possible and will be more than 10 to 15 mL (per feeding) in a term baby (during the first 1 to 2 days of life). Alternative feeding methods such as syringe or spoon feeding may also be used; however, these methods have not been shown to be effective in preserving breastfeeding. Bottles will not be placed in a breastfeeding infant’s bassinet (Howard et al., 2003; Howard et al., 1999; Marinelli, Burke, & Dodd, 2001). (II-1, II-2)

14. This institution does not give group instruction in the use of formula. Those parents who, after appropriate counseling, choose to formula feed their infants will be provided individual instruction.

15. Pacifiers will not be given to normal full-term breastfeeding infants. The pacifier guidelines at “name of institution” state that preterm infants in the Neonatal Intensive Care or Special Care Unit or infants with specific medical conditions (e.g., neonatal abstinence syndrome) may be given pacifiers for non-nutritive sucking. Newborns undergoing painful procedures (e.g., circumcision) may be given a pacifier as a method of pain management during the procedure. The infant will not return to the mother with the pacifier. “Name of institution” encourages “pain-free newborn care,” which may include breastfeeding during the heel stick procedure for the newborn metabolic screening tests (Gray et al., 2002). (I)

16. Routine blood glucose monitoring of full-term healthy appropriate-for-gestational age infants is not indicated. Assessment for clinical signs of hypoglycemia and dehydration will be ongoing (Wight, Marinelli, & Academy of Breastfeeding Medicine Clinical Protocol Committee, 2006). (I)

17. Antilactation drugs will not be given to any postpartum mother. (I)

18. Routine use of nipple creams, ointments, or other topical preparations will be avoided unless such therapy has been indicated for a dermatologic problem. Mothers with sore nipples will be observed for latch-on techniques and will be instructed to apply expressed colostrum or breast milk to the areola/nipple after each feeding. (III)

19. Nipple shields or bottle nipples will not be routinely used to cover a mother’s nipples, to treat latch-on problems, or to prevent or manage sore or cracked nipples or used when a mother has flat or inverted nipples. Nipple shields will be used only in conjunction with a lactation consultation and after other attempts to correct the difficulty have failed. (III)

20. After 24 hours of life, if the infant has not latched on or fed effectively, the mother will be instructed to begin to massage her breasts and hand express colostrum into the baby’s mouth during feeding attempts. Skin-to-skin contact will be encouraged. Parents will be instructed to watch closely for feeding cues and whenever these are observed to awaken and feed the infant. If the baby continues to feed poorly, hand expression by the mother or a double set-up electric breast pump will be initiated and maintained approximately every 3 hours or a minimum of eight times per day. Any expressed colostrum or mother’s milk will be fed to the baby by an alternative method. The mother will be reminded that she may not obtain much milk or even any milk the first few

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
times she expresses her breasts. Until the mother’s milk is available, a collaborative decision should be made among the mother, nurse, and healthcare professional (e.g., physician/nurse practitioner/certified nurse midwife) regarding the need to supplement the baby. Each day the responsible healthcare professional will be consulted regarding the volume and type of the supplement. Pacifiers will be avoided. In cases of problem feeding, the lactation consultant or specialist will be consulted (Academy of Breastfeeding Medicine Protocol Committee, "ABM clinical protocol #3," 2009). (I, III)

21. If the baby is still not latching on well or feeding well when discharged to home, the feeding/expression/supplementing plan will be reviewed in addition to routine breastfeeding instructions. A follow-up visit or contact will be scheduled within 24 hours. Depending on the clinical situation it may be appropriate to delay discharge of the couplet to provide further breastfeeding intervention, support, and education. (III)

22. All babies should be seen for follow-up within the first few days postpartum. This visit should be with a physician (pediatrician or family physician) or other qualified health care practitioner for a formal evaluation of breastfeeding performance, a weight check, assessment of jaundice and age appropriate elimination: (a) for infants discharged at less than 2 days of age (<48 hours), follow-up at 2 to 4 days of age; (b) for infants discharged between 48 and 72 hours, follow-up at 4 to 5 days of age. Infants discharged after 5 to 6 days may be seen 1 week later.

23. Mothers who are separated from their sick or premature infants will be
   a. Instructed on how to use skilled hand expression or the double set up electric breast pump. Instructions will include expression at least eight times per day or approximately every 3 hours for 15 minutes (or until milk flow stops, whichever is greater) around the clock and the importance of not missing an expression session during the night (III)
   b. Encouraged to breastfeed on demand as soon as the infant’s condition permits (III)
   c. Taught proper storage and labeling of human milk (III)
   d. Assisted in learning skilled hand expression or obtaining a double set-up electric breast pump prior to going home (III)

24. Before leaving the hospital (Academy of Breastfeeding Medicine Clinical Protocol Committee, 2007), breastfeeding mothers should be able to:
   a. Position the baby correctly at the breast with no pain during the feeding
   b. Latch the baby to breast properly
   c. State when the baby is swallowing milk
   d. State that the baby should be nursed a minimum of eight to 12 times a day until satiety, with some infants needing to be fed more frequently
   e. State age-appropriate elimination patterns (at least six urinations per day and three to four stools per day by the fourth day of life)
   f. List indications for calling a healthcare professional
   g. Manually express milk from their breasts (III)

25. Prior to going home, mothers will be given the names and telephone numbers of community resources to contact for help with breastfeeding, including (the support group or resource recommended by "name of institution").

26. "Name of institution" does not accept free formula or free breast milk substitutes. Nursery or Neonatal Intensive Care Unit discharge bags offered to all mothers will not contain infant formula, coupons for formula, logos of formula companies, or literature with formula company logos.

27. "Name of institution" health professionals will attend educational sessions on lactation management and breastfeeding promotion to ensure that correct, current, and consistent information is provided to all mothers wishing to breastfeed (American Academy of Pediatrics, American Academy of Obstetricians and Gynecologists, 2006).

Contraindications:
Breastfeeding is contraindicated in the following situations:

- Mothers who are human immunodeficiency virus (HIV)-positive in locations where artificial feeding is acceptable, feasible, affordable, sustainable, and safe (I)
- Mothers currently using illicit drugs (e.g., cocaine, heroin) unless specifically approved by the infant’s healthcare provider on a case-by-case basis (I)
- Mothers taking certain medications. Most prescribed and over-the-counter drugs are safe for the breastfeeding infant. Some medications may make it necessary to interrupt breastfeeding, such as radioactive isotopes, antimetabolites, cancer chemotherapy, some psychotropic medications and a small number of other medications. (III)
- Mothers with active, untreated tuberculosis. A mother can express her milk until she is no longer contagious. (I)
- Infants with galactosemia (I)
- Mothers with active herpetic lesions on her breast(s). Breastfeeding can be recommended on the unaffected breast. (The Infectious Disease Service will be consulted for problematic infectious disease issues.) (I)
- Mothers with onset of varicella within 5 days before or up to 48 hours after delivery, until they are no longer infectious (I)
Mothers with human T-cell lymphotrophic virus type I or type II (I)


1c.18 National Guideline Clearinghouse or other URL: http://www.guideline.gov/content.aspx?id=24013&search=breastfeeding+policy

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? Yes

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias: Academy of Breastfeeding Medicine Protocol Committee

1c.21 System Used for Grading the Strength of Guideline Recommendation: Other

1c.22 If other, identify and describe the grading scale with definitions: The system for categorizing recommendations in this guideline is as follows:

Levels of Evidence
I Evidence obtained from at least one properly randomized controlled trial
II-1 Evidence obtained from well-designed controlled trials without randomization
II-2 Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group
II-3 Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.
III Opinions of respected authorities, based on clinical experience, descriptive studies and case reports; or reports of expert committees

1c.23 Grade Assigned to the Recommendation: Grading varies from I to III

1c.24 Rationale for Using this Guideline Over Others: This policy is based on recommendations from the most recent breastfeeding policy statements published by the Office on Women’s Health of the U.S. Department of Health and Human Services, the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, the American Academy of Family Physicians, the World Health Organization (WHO), the Academy of Breastfeeding Medicine, and the UNICEF/WHO evidence-based “Ten Steps to Successful Breastfeeding.”

The recommendations were based primarily on a comprehensive review of the existing literature. In cases where the literature does not appear conclusive, recommendations were based on the consensus opinion of the group of experts.

Based on the NQF descriptions for rating the evidence, what was the developer’s assessment of the quantity, quality, and consistency of the body of evidence?

1c.25 Quantity: High  1c.26 Quality: High  1c.27 Consistency: High

Was the threshold criterion, Importance to Measure and Report, met? (1a & 1b must be rated moderate or high and 1c yes) Yes √ No □

Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.
For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be
conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See guidance on measure testing.

S.1 Measure Web Page (In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained). Do you have a web page where current detailed specifications for this measure can be obtained? Yes

S.2 If yes, provide web page URL: http://manual.jointcommission.org

2a. RELIABILITY. Precise Specifications and Reliability Testing:  H M L I

2a1. Precise Measure Specifications. (The measure specifications precise and unambiguous.)

2a1.1 Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome):
Newborns that were fed breast milk only since birth

2a1.2 Numerator Time Window (The time period in which the target process, condition, event, or outcome is eligible for inclusion): Episode of care

2a1.3 Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses: One data element is used to calculate the numerator:

1. Exclusive Breast Milk Feeding - Documentation that the newborn was exclusively fed breast milk during the entire hospitalization. Allowable Values: Yes or No/UTD. Cases are eligible for the numerator when allowable value = yes.

2a1.4 Denominator Statement (Brief, narrative description of the target population being measured):
Single term liveborn newborns discharged from the hospital with ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for single liveborn newborn as defined in Appendix A, Table 11.20.1 available at: http://manual.jointcommission.org

2a1.5 Target Population Category (Check all the populations for which the measure is specified and tested if any): Maternal Care

2a1.6 Denominator Time Window (The time period in which cases are eligible for inclusion): Episode of care

2a1.7 Denominator Details (All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):
Thirteen data elements are used to calculate the denominator:

1. Admission Date – The month, day and year of admission to acute inpatient care.
2. Admission Type- The code indicating priority/type of admission.
3. Admission to NICU - Documentation that the newborn was admitted to the Neonatal Intensive Care Unit (NICU) at this hospital any time during the hospitalization. Allowable values: Yes or No/UTD
4. Birthdate - The month, day and year the patient was born.
5. Clinical Trial - Documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients who are newborns were being studied. Allowable values: Yes or No/UTD
6. Discharge Date – The month day and year the patient was discharged from acute care, left against medical advice or expired during the stay.
7. Discharge Status - The place or setting to which the patient was discharged.
8. ICD-9-CM Other Diagnosis Codes - The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes associated with the secondary diagnoses for this hospitalization.
9. ICD-9-CM Other Procedure Codes - The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code that identifies significant procedures performed other than the principal procedure during this hospitalization.
10. ICD-9-CM Principal Diagnosis Code - The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code associated with the diagnosis established after study to be chiefly responsible for occasioning the admission of the
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patient for this hospitalization.
11. ICD-9-CM Principal Procedure Code - The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code that identifies the principal procedure performed during this hospitalization. The principal procedure is the procedure performed for definitive treatment rather than diagnostic or exploratory purposes, or which is necessary to take care of a complication.
12. Point of Origin for Admission or Visit - The code indicating the point of patient origin for this admission.
13. Reason for Not Exclusively Feeding Breast Milk - Reasons for not exclusively feeding breast milk during the entire hospitalization are clearly documented in the medical record. These reasons are due to a maternal medical condition for which feeding breast milk should be avoided. Allowable Values: Yes or No/UTD.

2a1.8 Denominator Exclusions (Brief narrative description of exclusions from the target population):
- Admitted to the Neonatal Intensive Care Unit (NICU) at this hospital during the hospitalization
- ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for galactosemia as defined in Appendix A, Table 11.21
- ICD-9-CM Principal Procedure Code or ICD-9-CM Other Procedure Codes for parenteral infusion as defined in Appendix A, Table 11.22
- Experienced death
- Length of Stay >120 days
- Enrolled in clinical trials
- Documented Reason for Not Exclusively Feeding Breast Milk
- Patients transferred to another hospital
- ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for premature newborns as defined in Appendix A, Table 11.23

2a1.9 Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses):
- The data element Admission to NICU is used to determine if the patient was admitted to the NICU.
- Patients with ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for galactosemia are excluded.
- Patients with ICD-9-CM Principal Procedure Code or ICD-9-CM Other Procedure Codes for parenteral infusion are excluded.
- The data element Discharge Status is used to determine if the patient experienced death.
- Length of stay (LOS) in days is equal to the Discharge Date minus the Admission Date. If the LOS is greater than 120 days the patient is excluded.
- Patients are excluded if “Yes” is selected for Clinical Trial.
- The data element Reason for Not Exclusively Feeding Breast Milk is used to determine if the patient had a documented reason for not being exclusively fed breast milk.
- The data element Discharge Status is used to determine if the patient the patient was transferred to another hospital.
- Patients with ICD-9-CM Principal Diagnosis Code or ICD-9-CM Other Diagnosis Codes for premature newborns are excluded.

2a1.10 Stratification Details/Variables (All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses):
Not Applicable

2a1.11 Risk Adjustment Type (Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in 2a1.13): No risk adjustment or risk stratification

2a1.13 Statistical Risk Model and Variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please
2a1.17-18. **Type of Score:** Rate/proportion

2a1.19 **Interpretation of Score** *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score):* Better quality = Higher score

2a1.20 **Calculation Algorithm/Measure Logic** *(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):*

1. Start processing. Run cases that are included in the PC-Newborn Initial Patient Newborns with Breast Feeding and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.

2. Check Admission Type
   a. If Admission Type equals 1, 2, 3, 5, 9, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   b. If Admission Type equals 4, continue processing and proceed to Point of Origin for Admission or Visit.

3. Check Point of Origin for Admission or Visit
   a. If Point of Origin for Admission or Visit equals 6, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   b. If Point of Origin for Admission or Visit equals 5, continue processing and proceed to Discharge Status.

4. Check Discharge Status
   a. If Discharge Status equals 02, 05, 20, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   b. If Discharge Status equals 01, 03, 04, 06, 07, 21, 43, 50, 51, 61, 62, 63, 64, 65, 66, 70, continue processing and proceed to Clinical Trial.

5. Check Clinical Trial
   a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
   b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   c. If Clinical Trial equals No, continue processing and proceed to Admission to NICU.

6. Check Admission to NICU
   a. If Admission to NICU is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
   b. If Admission to NICU equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   c. If Admission to NICU equals No, continue processing and proceed to Exclusive Breast Milk Feeding.

7. Check Exclusive Breast Milk Feeding
   a. If Exclusive Breast Milk Feeding is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
   d. If Exclusive Breast Milk Feeding equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.
   e. If Exclusive Breast Milk Feeding equals No, continue processing and proceed to Reason for Not Exclusively Feeding Breast Milk.

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
8. Check Reason for Not Exclusively Feeding Breast Milk
   a. If Reason for Not Exclusively Feeding Breast Milk is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
   b. If Reason for Not Exclusively Feeding Breast Milk equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
   c. If Reason for Not Exclusively Feeding Breast Milk equals No, the case will proceed to a Measure Category Assignment of D and will be in the measure population. Stop processing.

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:
URL
http://manual.jointcommission.org

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):
The initial patient population includes patients with age at admission (Admission Date – Birthdate) = 2 days, Length of Stay (Discharge Date - Admission Date) = 120 days, an ICD-9-CM Principal or Other Diagnosis Code as defined in Appendix A, Table 11.20.1, NO ICD-9-CM Principal or Other Diagnosis Code as defined in Appendix A, Table 11.21, NO ICD-9-CM-Principal or Other Procedure Code as defined in Appendix A, Table 11.22 and NO ICD-9-CM Principal or Other Diagnosis Code as defined in Appendix A, Table 11.23 are included in this subpopulation and are eligible to be sampled. The sample is taken randomly as follows for a monthly sample:
- Average monthly Initial Patient Population >= 181 results in a minimum random sample size of 37.
- Average monthly Initial Patient Population 46 – 180 results in a minimum random sample size of 20% of the population size.
- Average monthly Initial Patient Population 9 – 45 results in a minimum random sample size of 9.
- Average monthly Initial Patient Population <9 results in no sampling; 100% Initial Patient Population required.

2a1.25 Data Source (Check all the sources for which the measure is specified and tested). If other, please describe:
Administrative claims, Electronic Clinical Data, Paper Records

2a1.26 Data Source/Data Collection Instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): Each data element in the data dictionary includes suggested data sources. The data are collected using contracted Performance Measurement Systems (vendors) that develop data collection tools based on the measure specifications. The tools are verified and tested by Joint Commission staff to confirm the accuracy and conformance of the data collection tool with the measure specifications. The vendor may not offer the measure set to hospitals until verification as been passed.

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment:

2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:
URL
http://manual.jointcommission.org

2a1.33 Level of Analysis (Check the levels of analysis for which the measure is specified and tested): Facility, Population: National

2a1.34-35 Care Setting (Check all the settings for which the measure is specified and tested): Hospital/Acute Care Facility

2a2. Reliability Testing. (Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.)

2a2.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
The PC measure set has been in national use since the 2nd quarter of 2010. It is a requirement of participation in the ORYX initiative that data on all measures in the set are collected. (ORYX is the term used by The Joint Commission to describe the component of the hospital accreditation program which requires data collection and reporting on standardized national performance measures.) Demographics of organizations collecting and reporting data on these measures are as follows:

163 health care organizations representing various types, locations and sizes:
10 For Profit, 91 Not for Profit, 46 Military Facilities, 9 County, 2 State, 5 Other
15 >=500 beds; 29 250-499 beds; 50 100-249 beds; 69 <100 beds
Located in: AE, AK, AL, AP, AR, AZ, CA, DO, DC, FL, GA, HI, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, MT, NC, NE, NV, NY, OH,OK, PA, PR, RI, SC, TN, TX, VA, WA, WI, WV
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2a2.2 Analytic Method (Describe method of reliability testing & rationale):
This measure was adapted from NQF-endorsed measure 0480 Exclusive Breastfeeding During Birth Hospitalization. As such, reliability was addressed during the original endorsement. The Joint Commission will be conducting further reliability studies on this measure as well as the entire PC measure set beginning in October 2011. Currently, these hospitals are supported in their data collection and reporting efforts by 26 contracted performance measurement system (PMS) vendors. It is a contractual requirement of Joint Commission listed vendors that the quality and reliability of data submitted to them by contracted health care organizations must be monitored on a quarterly basis. In addition, The Joint Commission analyzes these data by running 17 quality tests on the data submitted into ORYX. (ORYX is the term used by The Joint Commission to describe the component of the hospital accreditation program which requires data collection and reporting on standardized national performance measures). The following is a list of the major tests done on the submitted ORYX data, taken from the 2011 ORYX Performance Measurement System Requirements manual.

- Transmission of complete data
- Usage of individual core measure data received: To understand if the HCO provides the relevant service to treat the relevant population
- Investigation of aberrant data points
- Verification of patient population and sample size
- Identification of missing data elements
- Validation of the accuracy of target outliers
- Data integrity
- Data corrections

Data Element Agreement Rate:
Inter-rater reliability testing methodology utilized by contracted performance measure system vendors as outlined in the contract is as follows:
- All clinical data elements and all editable demographic elements are scored.
- All measure data are reabstracted with originally abstracted data having been blinded so that the reabstraction is not biased.
- Reabstracted data are compared with originally abstracted data on a data element by data element basis. A data element agreement rate is calculated. Clinical and demographic data are scored separately, and an overall agreement rate is computed.

2a2.3 Testing Results (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):
Validity (Measure evaluation criterion 2b)
Data element agreement rates were reported to The Joint Commission for 1Q11. This reflects the findings of 106 hospitals, comprising 26,302 records (100% sample). The following table delineates calculated agreement rates for individual data elements that are used to compute measure rates for PC-05.

<table>
<thead>
<tr>
<th>Data Elements with a Mismatch - Newborn</th>
<th>total n</th>
<th>total d</th>
<th>rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission Date</td>
<td>661</td>
<td>662</td>
<td>99.85%</td>
</tr>
<tr>
<td>Admission to NICU</td>
<td>571</td>
<td>576</td>
<td>99.13%</td>
</tr>
<tr>
<td>Admission Type</td>
<td>661</td>
<td>662</td>
<td>99.85%</td>
</tr>
<tr>
<td>Exclusive Breast Milk Feeding</td>
<td>513</td>
<td>526</td>
<td>97.53%</td>
</tr>
<tr>
<td>Point of Origin for Admission or Visit</td>
<td>671672</td>
<td>99.85%</td>
<td></td>
</tr>
<tr>
<td>Reason for Not Exclusively Feeding Breast Milk</td>
<td>334</td>
<td>342</td>
<td>97.66%</td>
</tr>
</tbody>
</table>

See Guidance for Definitions of Rating Scale: H=High; M=Moderate; L=Low; I=Insufficient; NA=Not Applicable
These agreement rates are considered to be well within acceptable levels.

2b. VALIDITY. Validity, Testing, including all Threats to Validity:  H□ M□ L□ I □

2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:
This measure focuses on the rate of newborns that were exclusively fed breast milk during the entire birth hospitalization. The literature supports the focus on healthy term newborns that were exclusively fed breast milk. This measure excludes patients diagnosed with galactosemia, receiving TPN, experienced death or requiring a higher level of care due to illness or prematurity resulting in an admission to the NICU or transfer to another hospital, since these are contraindications supported in the literature. Also excluded from the measure are patients with a length of stay greater than 120 days, and those enrolled in a clinical trial. These exclusions are not addressed in the literature, but are included for this measure in order to harmonize with other CMS/Joint Commission aligned measures.

2b2. Validity Testing. (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

2b2.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
The PC measure set has been in national use since the 2nd quarter of 2010. Demographics of organizations collecting and reporting data on these measures are as follows: 163 health care organizations representing various types, locations and sizes:

- 10 For Profit, 91 Not for Profit, 46 Military Facilities, 9 County, 2 State, 5 Other
- 15 >=500 beds; 29 250-499 beds; 50 100-249 beds; 69 <100 beds

Located in: AE, AK, AL, AP, AR, AZ, CA, DO, DC, FL, GA, HI, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, MT, NC, NE, NV, NY, OH, OK, PA, PR, RI, SC, TN, TX, VA, WA, WI, WV
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2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):
Since the measure has been in national use, continued face validity of the measure has been determined through analysis of feedback from measure users. The Joint Commission provides a web-based application with which measure users can provide feedback regarding appropriateness of measure specifications, request clarification of specifications, and/or provide other comments pertinent to the measure. This feedback is systematically continually reviewed in order to identify trends and to identify areas of the measure specifications that require clarification or revision. Additionally, Joint Commission staff continually monitors the national literature and environment in order to assess continued validity of this measure.

In addition, The Joint Commission will begin reliability site visits this year. During the site visits, Joint Commission staff will conduct focus group interviews with hospital staff working with the PC measures to obtain feedback regarding the validity of the measures and suggestions for further refinement of the specifications.

2b2.3 Testing Results (Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):
Analysis of feedback obtained via our automated feedback system reveals slightly more than 130 submissions regarding specifications for this measure since its implementation in 2010. Predominant themes of these submissions involved questions regarding clarification of the data elements Exclusive Breast Milk Feeding regarding the definition and Reason for Not exclusively Feeding Breast Milk as to why additional newborn conditions were not considered exclusions. Also the data element Discharge from NICU was changed to Admission to NICU based on feedback that some hospitals sent newborns to a step-down unit from the NICU prior to discharge. Additional notes for abstractors were added to the data elements for clarification. Other notes for abstractors were added to the data element admission date to clarify the date of delivery is used as the admission date and not the date of the order written to admit. The denominator statement and algorithm were changed to single term newborns discharged from the hospital to capture healthy newborns. In addition, the denominator excluded population and algorithm were revised to capture premature newborns with an additional ICD-9-CM diagnosis code table and newborns transferred to another hospital.

POTENTIAL THREATS TO VALIDITY. (All potential threats to validity were appropriately tested with adequate results.)

2b3. Measure Exclusions. (Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)
2b3.1 Data/Sample for analysis of exclusions (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
The PC measure set has been in national use since the 2nd quarter of 2010. Demographics of organizations collecting and reporting data on these measures are as follows:
163 health care organizations representing various types, locations and sizes:
10 For Profit, 91 Not for Profit, 46 Military Facilities, 9 County, 2 State, 5 Other
15 >=500 beds; 29 250-499 beds; 50 100-249 beds; 69 <100 beds
Located in: AE, AK, AL, AP, AR, AZ, CA, CO, DC, DE, FL, GA, HI, ID, IL, IN, KS, KY, LA, MA, MD, MI, MN, MO, MS, MT, NC, NE, NV, NY, OH, OK, PA, PR, RI, SC, TN, TX, VA, WA, WI, WV
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2b3.2 Analytic Method (Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):
Measure exclusions that were not derived directly from the evidence are presented below. Please note that these are population exclusions that are necessary to ensure consistency in all measures in this 5 measure set.
These exclusions were analyzed for frequency of occurrence. An issue that is of great concern to users of this measure is that due to the presence of exceptions to the measure, attainment of a 100% measure rate is not possible. Because of the role of this measure in the current Joint Commission accreditation process, this is especially troubling to measure users. This concern is the basis for a number of the non-evidence-based exclusions to these measures. Additional reasons for these population exclusions are enumerated in our response to section 2b1.1 above. The following measure exclusions that were not derived directly from the evidence are as follows:
1. Patients with LOS <120 days
2. Patients enrolled in clinical trials

2b3.3 Results (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):
N=353,671
1. Patients who have a length of stay (LOS) greater than 120 days =0%
2. Patients enrolled in clinical trials =0%

2b4. Risk Adjustment Strategy. (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

2b4.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
Not Applicable

2b4.2 Analytic Method (Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):
Not Applicable

2b4.3 Testing Results (Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata):
Not Applicable

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: Not Applicable

2b5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b5.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
As previously noted the PC measure set has been in national use since the 2nd quarter of 2010. Demographics of organizations...
collecting and reporting data on these measures are as follows:
163 health care organizations representing various types, locations and sizes:
10 For Profit, 91 Not for Profit, 46 Military Facilities, 9 County, 2 State, 5 Other
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2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):
The method used to analyze meaningful differences in performance at The Joint Commission is Target Analysis. The object of target analysis is to compare a health care organizations (HCO) data against a comparative norm for the purpose of evaluating performance improvement opportunities. When an organization’s performance level is statistically significantly different from a comparative norm, it is considered a statistical deviation. A statistical deviation may be desirable or undesirable depending on the “direction of improvement” of the measure.
There are two components to the target analysis methodology used at The Joint Commission. Given the national average for a performance measure, a target range is constructed. Using generalized linear mixed models methodology (also known as hierarchical models), a predicted estimate of an HCO’s performance, with a corresponding 95% confidence interval, is generated. This confidence interval is compared to the target range, to determine the HCOs’ rating. The estimate of the organization’s true performance is based on both the data from that organization and on data from the entire set of reporting organizations.

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):
PC-05 Distribution of Outliers

2011 1st Quarter Data:
Scores on this measure: N=161, Mean 48.33%, SD 0.23493
10th Percentile= 19.23%
25th Percentile= 31.88%
50th Percentile= 50%
75th Percentile= 63.6%
90th Percentile= 78.95%
4 (2.48%) Favorable – results statistically significantly higher than the national rate
119 (73.91%) Neutral – results not significantly different from target range
38 (23.6%) Undesirable – results statistically significantly lower than the national rate

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):
Multiple data sources are not used for this measure.

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):
Not Applicable

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):
Not Applicable

2c. Disparities in Care:  H M L I NA (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts): The measure is not stratified for disparities.
2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:
Although rates of exclusive breastfeeding were significantly lower among black infants (compared with white infants) and infants born to unmarried mothers (compared with married mothers, this measure is not stratified for these elements. The Joint Commission does not currently capture date elements for race or ethnicity because these data elements have not been shown to be reliably collectable due to the fact that no national standardized definitions exist for these data elements. Also, not all hospitals collect race and ethnicity. In the future, it may be feasible for The Joint Commission to explore how race and ethnicity and other relevant disparity data might be collected reliably in the future.

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met? (Reliability and Validity must be rated moderate or high) Yes[ ] No[ ]
Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)

C.1 Intended Purpose/Use (Check all the purposes and/or uses for which the measure is intended): Public Reporting, Quality Improvement (Internal to the specific organization), Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Regulatory and Accreditation Programs

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): Public Reporting, Regulatory and Accreditation Programs, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

3a. Usefulness for Public Reporting: H[ ] M[ ] L[ ] I[ ]
(The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large (If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: [For Maintenance – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]
The Joint Commission has a longstanding commitment to providing meaningful information about the comparative performance of accredited organizations to the public. The Quality Check® Web site, www.qualitycheck.org, launched in 1996, fulfills this commitment. Among other things, Quality Check allows consumers to view or download free hospital performance measure results. Measure rates for PC-05 (and all the PC measures) will be included in the hospital performance measure results beginning in 2012 once reliability testing has been completed.

3a.2 Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: All measure specifications (e.g., numerator, denominator, exclusions, data elements and measure calculation algorithms) are standardized in order to produce consistent measure results. Specifications are updated biannually based on feedback from vendors, and hospitals, as well as technical advisory member recommendations and updated clinical practice guidelines. Data are collected using data collection tools that have been verified by The Joint Commission to accurately collect measure data elements and compute measure assignment categories according to the measure specifications. Quarterly data reported to The Joint
Commission are subject to a number of data quality tests to ensure the accuracy of the data. The measure rate is computed using a standardized measure calculation algorithm.

The Joint Commission provides an opportunity for abstractors to submit questions and feedback about the measure specifications via an on-line website. As discussed previously, this information is used to evaluate the need for revisions and provide abstractors with a database of frequently asked questions. Measure updates and issues about the measures are presented and discussed at an annual performance measurement system vendor conference. These activities support the Joint Commission’s effort to provide results that are useable, understandable and useful for public reporting.

3.2 Use for other Accountability Functions (payment, certification, accreditation). If used in a public accountability program, provide name of program(s), locations, Web page URL(s): The Joint Commission is a national (and international) accreditor of hospitals and other healthcare organizations. This measure set is one of 10 available measure sets from which hospitals can select to meet The Joint Commission’s ORYX accreditation program requirement for data collection and reporting. Additional information located at: http://www.jointcommission.org/facts_about_oryx_for_hospitals/

3b. Usefulness for Quality Improvement: H M L I
(The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. If used in quality improvement program, provide name of program(s), locations, Web page URL(s): [For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement]. While The Joint Commission developed this measure for and uses results from this measure in its accreditation activities, the measure is also intended for use in internal quality improvement by accredited organizations.

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results:
From an accreditation perspective, measure results have proven useful in that they are used in the Priority Focus Process, which helps to focus accreditation survey activities toward areas of greatest need. From the hospital quality improvement perspective, measure rates are included in the Joint Commission’s Strategic Surveillance System (S3) product, which is made available, at no additional cost to accredited organizations and is used by them to identify gaps in the care they provide relative to other measure users. Aggregate measure results have improved over time, indicating that they are being used by hospitals to identify and address areas in need of improvement. Since this measure was introduced nationally in 2010, aggregate performance has improved. PC-05 began with 2010 Quarter 2 reporting data at 39.7% or a performance gap of 60.3%. There has been consistent improvement in aggregate performance rates for the following consecutive four quarters, with the most recent 2011 Quarter 1 reportable performance at 42.9%.

Overall, to what extent was the criterion, Usability, met? H M L I
Provide rationale based on specific subcriteria:

### 4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)

4a. Data Generated as a Byproduct of Care Processes: H M L I

4a.1-2 How are the data elements needed to compute measure scores generated? (Check all that apply).
Data used in the measure are:
generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition,
Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims),
Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

4b. Electronic Sources: H M L I

4b.1 Are the data elements needed for the measure as specified available electronically (Elements that are needed to compute measure scores are in defined, computer-readable fields): Some data elements are in electronic sources
4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources: The Joint Commission is in the process of preparing for conversion to eMeasure specification beginning in the 4th quarter 2011 for the PC measure set.

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H □ M □ L □ I □

4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:
The initial patient population algorithm for PC-05 was revised because premature newborns and multiple gestations were not excluded from the measure. The measure algorithm was also revised because outborn newborns and newborns transferred to another hospital were not excluded from the measure. In response, the ICD-9-CM diagnosis tables were updated and new tables were added to identify those patients. Additionally, the data element Discharged from NICU was changed to Admission to NICU. Since implementation, the Notes for Abstraction section of the data elements has been updated to clarify issues that have been identified after review of the feedback received from measure users.

4d. Data Collection Strategy/Implementation: H □ M □ L □ I □

A.2 Please check if either of the following apply (regarding proprietary measures):
4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (e.g., fees for use of proprietary measures):
At the present time, hospitals using this performance measure generally collect measure data via manual review of the paper medical record, the EMR or a combination of both. Collected data are submitted to The Joint Commission on a quarterly basis, by way of contracted performance measurement system vendors, as described previously. Specifications for this measure are freely available to anyone who wishes to use the measure. Feedback from hospitals using this measure indicates that required data elements are generally available in the medical record, and measure specifications are robust and easy to understand. As described above, as feedback from measure users has indicated the need for clarification or revision of measure specifications, this has taken place.

Overall, to what extent was the criterion, Feasibility, met? H □ M □ L □ I □
Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes □ No □
Rationale:
If the Committee votes No, STOP.
If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:

5a. Harmonization

5a.1 If this measure has EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications completely harmonized?

5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:
5b. Competing Measure(s)

5b.1 If this measure has both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): The Joint Commission, One Renaissance Blvd., Oakbrook Terrace, Illinois, 60181

Co.2 Point of Contact: Jerod M., Loeb, PhD, jloeb@jointcommission.org, 630-792-5920-

Co.3 Measure Developer if different from Measure Steward: The California Maternal Quality Care Collaborative, 750 Welch Rd., Suite 224, Palo Alto, California, 94304

Co.4 Point of Contact: Elliott., Main, MD, MainE@sutterhealth.org, 415-750-6003-

Co.5 Submitter: Ann, Watt, MBA, RHIA, awatt@jointcommission.org, 630-792-5944-, The Joint Commission

Co.6 Additional organizations that sponsored/participated in measure development:
The California Maternal Quality Care Collaborative

Co.7 Public Contact: Celeste, Milton, MPH, BSN, RN, cmilton@jointcommission.org, 630-792-5925-, The Joint Commission

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

Michael Ross, MD, MPH (Chair)
Harbor-UCLA Medical Center
Torrance, CA

Wanda Barfield, MD, MPH
Centers for Disease Control and Prevention
Atlanta, GA

Kenneth E. Brown, MD, MBA, FACOG, FACHE
Woman’s Hospital
Lafayette, LA

Martin McCaffrey, MD
UNC North Carolina Children’s Hospital
Chapel Hill, NC

Cathy Collins-Fulea, MSN, CNM
Henry Ford Hospital
Detroit, MI

Janet H. Muri, MBA
National Perinatal Information Center/
Quality Analytic Services
The technical advisory panel (TAP) members determined priority areas that could be evaluated to improve care related to perinatal care during the development timeframe. After implementation, minor revisions, acknowledged by TAP representatives, were made to improve clarity. Hospital feedback will be reviewed during the reliability testing phase of the project to assist the TAP in making the final measure recommendations.

Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward: 0480 Exclusive Breastfeeding During Birth Hospitalization

The California Maternal Quality Care Collaborative (CMQCC) was the measure steward and original measure developer. The measure was recommended for inclusion by the PC TAP as one of five measures in the Joint Commission's Perinatal Care (PC) core measure set. The Joint Commission held a series of conference calls with CMQCC to discuss the measure specifications and proposed revisions and worked with the original measure developer for agreement on specifications revisions prior to national implementation. As work began to re-endorse the measure, The Joint Commission assumed stewardship of the measure.

Ad.3 Year the measure was first released: 2010
Ad.4 Month and Year of most recent revision: 08, 2011
Ad.5 What is your frequency for review/update of this measure? Biannual
Ad.6 When is the next scheduled review/update for this measure? 02, 2012

Ad.7 Copyright statement: No royalty or use fee is required for copying or reprinting this manual, but the following are required as a condition of usage: 1) disclosure that the Specifications Manual is periodically updated, and that the version being copied or reprinted may not be up-to-date when used unless the copier or printer has verified the version to be up-to-date and affirms that, and 2) users participating in Joint Commission accreditation, including ORYX® vendors, are required to update their software and associated documentation based on the published manual production timelines.

Ad.8 Disclaimers:

Ad.9 Additional Information/Comments:

Date of Submission (MM/DD/YY): 10/17/2011