“Update on The Joint Commission’s Perinatal Quality (PC) Core Measure Set”

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Core Measure Set

A = Initial set
B = Initial set
C = Initial set
D = Initial set
E = Initial set
F = Future measure
G = Future measure
Core Measure Set Definition

A unique grouping of performance measures carefully selected to provide, when viewed together, a robust picture of the care provided.
Core Measure Attributes

- Established evaluation criteria
- Standardized
- Precisely defined
- Can be uniformly adopted
- Data collection efforts
Joint Commission Accountability Measures Framework

- Research
- Accuracy
- Proximity
- Adverse Effects
Accountability Measures — Using Measurement to Promote Quality Improvement

Mark R. Chassin, M.D., M.P.P., M.P.H., Jerod M. Loeb, Ph.D., Stephen P. Schmaltz, Ph.D., and Robert M. Wachter, M.D.

Measuring the quality of health care and using those measurements to promote improvements in the delivery of care, to influence payment for services, and to increase transparency are now commonplace. These activities, which now involve virtually all U.S. hospitals, are migrating to ambulatory and other care settings and are increasingly evident in health care systems worldwide. Many constituencies are pressing for continued expansion of programs that rely on quality measurement and reporting.

Remarkably recent. In 1998, the Joint Commission launched its ORYX initiative, the first national program for the measurement of hospital quality, which initially required the reporting only of non-standardized data on performance measures. In 2002, accredited hospitals were required to collect and report data on performance for at least two of four core measure sets (acute myocardial infarction, heart failure, pneumonia, and pregnancy); these data were made publicly available by the Joint Commission in 2004.
# History of Core Measures

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Measures</th>
<th>Composite Rate</th>
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<tbody>
<tr>
<td>2000</td>
<td>Few</td>
<td>N/A</td>
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<tr>
<td>2002</td>
<td>19</td>
<td>81.8%</td>
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<tr>
<td>2009</td>
<td>30</td>
<td>95.4%</td>
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</table>
Goals of Core Measure Program

- Retire non-accountability measures
- Replace retired measures
- Integrate into standards
Current Joint Commission
ORYX Requirements

Data collection required on 4 measures sets since 2008, some exceptions for small and specialty hospitals

Current standardized core measure sets
- Acute myocardial infarction
- Heart failure
- Pneumonia
- Surgical Care Improvement Project
- Perinatal care
- Children’s asthma care
- Hospital outpatient
- Hospital-based inpatient psychiatric services
- Venous thromboembolism
- Stroke
- Immunization
- Emergency department
- Tobacco treatment
- Substance use
Future Joint Commission
ORYX Requirements

- Data collection required on 6 measures sets effective 2014
- PC set mandatory if annual births $\geq 1100$
- Some exceptions for small and specialty hospitals
Perinatal Care (PC) Project

Overview

- 2007 Board of Commissioners recommendation
  - Use current evidence
- 2008 National Quality Forum project
  - Technical Advisory Panel (TAP) appointed
- 2009 TAP meeting
  - Measure specifications completed
  - Manual released
- 2010 Data Collection began
New Reporting Requirement for Centers for Medicare and Medicaid Services (CMS)

- Final Rule posted August 1, 2012
- PC-01: Elective Delivery included
- Data collection starts 1/1/13
- Payment Determination FY 2015
PC Core Measures

- PC-01 Elective Delivery
- PC-02 Cesarean Section
- PC-03 Antenatal Steroids
- PC-04 Health Care-Associated Bloodstream Infections in Newborns
- PC-05 Exclusive Breast Milk Feeding
- PC-05a Exclusive Breast Milk Feeding Considering Mother’s Choice

NQF Endorsed
PC Core Measure Set

- Two Distinct Populations:
  - Mothers
  - Newborns

- Consists of Five Measures Representing the Following Domains of Care:
  - Assessment/Screening
  - Prematurity Care
  - Infant Feeding
PC-01

Elective Delivery

Original Performance Measure/Source

Developer: Hospital Corporation of America-Women's and Children's Clinical Services
Rationale

- American College of Obstetricians and Gynecologists (ACOG) and American Academy of Pediatrics (AAP) standard
- Significant short-term newborn morbidity
- Elective inductions result in more cesarean sections
Numerator and Denominator

Patients with elective deliveries

Patients delivering newborns with \(\geq 37 \text{ and } < 39\) weeks of gestation completed
Denominator Populations

Included Populations:

- Principal or Other Diagnosis Codes for planned cesarean section in labor- Appendix A, Table 11.06.1
Denominator Populations (Cont.)

Excluded Populations:
- Principal or Other Diagnosis Codes for Conditions Possibly Justifying Elective Delivery Prior to 39 Weeks Gestation- Appendix A, Table11.07
- < 8 years of age
- >= to 65 years of age
- LOS >120 days
- Enrolled in clinical trials
- Prior uterine surgery
- Gestational Age < 37 or ≥ 39 weeks
Denominator Data Elements

- Admission Date
- Birthdate
- Clinical Trial
- Discharge Date
- Gestational Age
- ICD-9-CM Principal or Other Diagnosis Codes
- Prior Uterine Surgery

NEW!
Gestational Age (PC-01, 02 & 03)

- Notes for Abstraction change: documentation by clinicians expanded to all acceptable sources
- Vital records reports an acceptable data source (effective 7/1/13)
Prior Uterine Surgery

Allowable Values changed

Additional inclusions:

- Prior classical cesarean section (vertical incision into upper uterine segment)
- Prior myomectomy
- Prior surgery with perforation
- History of uterine window
- History of uterine rupture
Numerator Populations

- Included Populations: Principal or Other Procedure Codes for one or more of the following:
  - Medical induction of labor - Appendix A, Table 11.05
  - Cesarean section - Appendix A, Table 11.06 while not in Labor or experiencing Spontaneous Rupture of Membranes
- Excluded Populations: None
Numerator Data Elements

- ICD-9-CM Principal & Other Procedure Codes
- Labor
- Spontaneous Rupture of Membranes
Labor

- Data element re-named and simplified
- Documentation of contractions/cervical change removed
- List of clinicians added

Inclusions:
- Active Labor
- Spontaneous Labor
- Early Labor

Exclusions:
- Prodromal Labor
- Latent Labor
PC-02

Cesarean Section

Original Performance Measure/Source Developer: California Maternal Quality Care Collaborative
Rationale

- Skyrocketing increase in rates
- Most variable portion of CS rate
- Performance improvement opportunity
Numerator and Denominator

Patients with cesarean sections

Nulliparous patients delivered of a live term singleton newborn in vertex presentation
Denominator Populations

- Nulliparous patients
- With Principal or Other Diagnosis Codes for outcome of delivery - Appendix A, Table 11.08
- And with a delivery of a newborn with 37 weeks or more of gestation completed
Excluded Populations: Principal or Other Diagnosis Codes, for contraindications to vaginal delivery - Appendix A, Table 11.09

- < 8 years of age
- >= to 65 years of age
- LOS > 120 days
- Enrolled in clinical trials
- Gestational Age < 37 weeks
Denominator Data Elements

- Admission Date
- Birth Date
- Clinical Trial
- Discharge Date
- Gestational Age
- ICD-9-CM Principal or Other Diagnosis Codes
- ICD-9-CM Principal or Other Procedure Codes
- Parity
Notes for Abstraction change: documentation by clinicians expanded to all acceptable sources.

Vital records reports an acceptable data source (effective 7/1/13).
Numerator Populations

**Included Populations:** Principal or Other Procedure Codes for cesarean section - Appendix A, Table 11.06

**Excluded Populations:** None
Numerator Data Elements

ICD-9-CM Principal or Other Procedure Codes
Risk Adjustment

Maternal Age
Stratification by Ages

- PC-02a Cesarean Section - Overall Rate
- PC-02b Cesarean Section - 8 through 14 years
- PC-02c Cesarean Section - 15 through 19 years
- PC-02d Cesarean Section - 20 through 24 years
- PC-02e Cesarean Section - 25 through 29 years
- PC-02f Cesarean Section - 30 through 34 years
- PC-02g Cesarean Section - 35 through 39 years
- PC-02h Cesarean Section - 40 through 44 years
- PC-02i Cesarean Section - 45 through 64 years
PC-03

Antenatal Steroids

Original Performance Measure/Source
Developer: Providence St Vincent’s Hospital/Council of Women and Infant’s Specialty Hospitals
Rationale

- National Institutes of Health 1994 recommendation
- Reduces the risks of respiratory distress syndrome, prenatal mortality, and other morbidities
Numerator and Denominator

Patients with antenatal steroid therapy initiated prior to delivering preterm newborns

NEW!

Patients delivering live preterm newborns with $\geq 24$ and $<32$ weeks gestation completed
Denominator Populations

Included Populations: NA
Denominator Populations (Cont.)

Excluded Populations:

- < 8 years of age
- >= to 65 years of age
- LOS > 120 days
- Enrolled in clinical trials
- Documented Reason for Not Initiating Antenatal Steroid Therapy
- Principal or Other Diagnosis Codes for fetal demise- Appendix A, Table 11.09.1
- Gestational Age < 24 or >= 32 weeks
Denominator Data Elements

- Admission Date
- Birthdate
- Clinical Trial
- Discharge Date
Denominator Data Elements (Cont.)

- **ICD-9-CM Principal or Other Diagnosis Codes**
- **Gestational Age**
- **Reason for Not Initiating Antenatal Steroid Therapy**
Reason for Not Initiating Antenatal Steroid Therapy

- Data element re-named
- Documentation why therapy was not initiated versus a full course
- Other implied reason includes chorioamnionitis
Numerator Populations

**Included Populations:** Antenatal steroid therapy initiated - Appendix B, Table 11.0

**Excluded Populations:** None
Numerator Data Elements

- Antenatal Steroid Therapy Initiated
Antenatal Steroid Therapy Initiated

- Data element re-named
- Requirement for full course changed to initiation of therapy
PC-04

Health Care-Associated Bloodstream Infections in Newborns

Original Performance Measure/Source Developer: Agency for Healthcare Research and Quality
Rationale

- Rates range from 6% to 33%
- Increased mortality, length of stay & hospital costs
- Effective preventive measures available
Numerator and Denominator

Newborns with septicemia or bacteremia

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Liveborn newborns
Denominator Populations

**Included Populations:** Other Diagnosis Codes for birth weight between 500 and 1499g - Appendix A, Table 11.12, 11.13,11.13.1 or 11.14 OR *Birth Weight* between 500 and 1499g

OR
Other Diagnosis Codes for birth weight $\geq 1500$g - Appendix A, Table 11.15, 11.16, 11.16.1 or 11.17 OR Birth Weight $\geq 1500$g who experienced one or more of the following:

- Experienced death
- Principal or Other Procedure Codes for major surgery - Appendix A, Table 11.18
- Principal or Other Procedure Codes for mechanical ventilation - Appendix A, Table 11.19
- Transferred in from another acute care hospital within 2 days of birth
Excluded Populations Effective 7/1/13:

- Principal Diagnosis Code for septicemias or bacteremias- Appendix A, Table 11.10.2
- Other Diagnosis Code for septicemias or bacteremias- Appendix A, Table 11.10.2 OR Principal or Other Diagnosis Codes for newborn septicemia or bacteremia- Appendix A, Table 11.10 with *Bloodstream Infection Present on Admission*
- Other Diagnosis Codes for birth weight < 500g- Appendix A, Table 11.20 OR *Birth Weight* < 500g
- LOS < 2 days
- Enrolled in clinical trials
Denominator Data Elements

- Admission Date
- Birthdate
- Birth Weight
- Bloodstream Infection Present on Admission
- Clinical Trial
Denominator Data Elements (Cont.)

- Discharge Date
- Discharge Disposition
- ICD-9-CM Principal or Other Diagnosis Codes
- ICD-9-CM Principal or Other Procedure Codes

NEW!
Birth Weight

- Clarification added on how to verify very low or high birth weights
- Vital records report an acceptable data source
- Data sources prioritized:
  - NICU Admission Assessment or Notes
  - Delivery and/or Operation Room Record
Bloodstream Infection Present on Admission

- New data element
- Positive blood cultures
- Negative or inconclusive blood cultures with suspicion & treatment
- Include if POA indicator present with ICD-9 codes for septicemia or bacteremia
Additional Changes

- Removed Admission Type and Point of Origin for Admission or Visit
- Remove Discharge Status and Replace with Discharge Disposition
Numerator Populations

- **Included Populations Effective 7/1/13:**
  - Other Diagnosis Codes for newborn septicemia or bacteremia - Appendix A, Table 11.10
  
  OR
  
  - Other Diagnosis Codes for sepsis - Appendix A, Table 11.10.1

- **Excluded Populations:** None
Numerator Data Elements

ICD-9-CM Other Diagnosis Codes
Risk Adjustment

- Birth Weight: 3 birth weight categories (500-999, 1000-1249, 1250-2499 grams)
- Congenital Anomalies: 3 different types (gastrointestinal, cardiovascular, other specified) identified through ICD-9 codes
- Out-born birth
- Death or transfer out
PC-05

Exclusive Breast Milk Feeding

Original Performance Measure/Source Developer: California Maternal Quality Care Collaborative
Rationale

- Goal of World Health Organization (WHO), Department of Health and Human Services (DHHS), American Academy of Pediatrics (AAP) and American College of Obstetricians and Gynecologists (ACOG)

- Numerous benefits for the newborn
Numerator and Denominator

Newborns that were fed breast milk only since birth

Single term newborns discharged alive from the hospital
Denominator Populations

**Included Populations:** Principal Diagnosis Code for single liveborn newborn
Denominator Populations (Cont.)

Excluded Populations:

- Admitted to the Neonatal Intensive Care Unit (NICU)
- Other Diagnosis Code for galactosemia
- Principal or Other Procedure Code for parenteral infusion
- Experienced death
**Excluded Populations (Cont.)**

- LOS >120 days
- Enrolled in clinical trials
- Documented *Reason for Not Exclusively Feeding Breast Milk*
- Patients transferred to another hospital
- Other Diagnosis Codes for premature newborns - Appendix A, Table 11.23
Denominator Data Elements

- Admission Date
- Admission to NICU
- Birthdate
- Clinical Trial
- Discharge Date
- Discharge Disposition
Denominator Data Elements (Cont.)

- ICD-9-CM Principal & Other Diagnosis Codes
- ICD-9-CM Principal & Other Procedure Codes
- Reason for Not Exclusively Feeding Breast Milk

NEW!
Admission to NICU

- Clarification of definition of NICU
- Critical care services provided
- Observation/transitional care excluded
Additional Changes

- Remove *Discharge Status* and Replace with *Discharge Disposition*
Numerator Populations

- **Included Populations:** NA
- **Excluded Populations:** None
Numerator Data Elements

Exclusive Breast Milk Feeding
PC-05a

Exclusive Breast Milk Feeding
Considering Mother’s Choice

NEW!
Newborns that were fed breast milk only since birth

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NEW!

Single term newborns discharged alive from the hospital excluding those whose mothers chose not to breast feed
Reason for Not Exclusively Feeding Breast Milk

- Allowable values changed:
  - Maternal medical conditions
  - Maternal choice
  - No reason documented

- Mother’s choice at admission must be clearly documented

- In absence of documentation- do not assume
FAQs

PC-01 Elective Delivery
How come some of ACOG’s approved justifications are not considered?

- Purpose is to enable hospitals to establish a baseline for performance to determine whether improvement efforts are effective over time

- Not every conceivable exclusion for the measure included in Table 11.07
How come some of ACOG’s approved justifications are not considered? (Cont.)

- Weighing the burden of data collection versus the frequency with which these conditions occur
- The value of including every conceivable justification outweighed by the additional time required to identify those cases via medical record review
FAQs

PC-02 Cesarean Section
Why are no other contraindications to vaginal deliveries considered such as maternal cardiac conditions or fetal distress?

- The measure is designed to measure complications that largely arise in labor and not exclude them.
- There are certainly good reasons to do a cesarean section that are captured in the measure.
- The premise is that medical practices during labor lead to the development of indications that were potentially avoidable.
FAQs

PC-05 Exclusive Breast Milk Feeding
How is exclusive breast milk feeding defined?

- A newborn receiving only breast milk and no other liquids or solids except for drops or syrups consisting of vitamins, minerals, or medicines.
- If the newborn receives any other liquids including water during the entire hospitalization, select allowable value ‘No’.
- Exclusive breast milk feeding includes the newborn receiving breast milk via a bottle or other means beside the breast.
Why aren’t more newborn medical conditions excluded?

- Not all medical indications for formula supplementation in the first days of life are excluded from this measure.

- Many of these indications have a large variation in the definitions, thresholds and application of supplementation utilization.

- Rate of these complications should not vary greatly from hospital to hospital, though their severity can be driven by obstetric care.
FAQs

What are the national benchmarks for the PC measures?
<table>
<thead>
<tr>
<th>Measure Number</th>
<th>Measure Name</th>
<th>2011 Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perinatal Care Composite</td>
<td></td>
<td>53.2%</td>
</tr>
<tr>
<td>PC-01</td>
<td>Elective Delivery</td>
<td>13.6%</td>
</tr>
<tr>
<td>PC-02</td>
<td>Cesarean Section*</td>
<td>26.3%</td>
</tr>
<tr>
<td>PC-03</td>
<td>Antenatal Steroids</td>
<td>73.6%</td>
</tr>
<tr>
<td>PC-04</td>
<td>Health Care-Associated Bloodstream Infections in Newborns*</td>
<td>0.9%</td>
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<tr>
<td>PC-05</td>
<td>Exclusive Breast Milk Feeding</td>
<td>46.2%</td>
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* Denotes outcome measure
Resources
March of Dimes Perinatal Care Resource

Toward Improving the Outcome of Pregnancy III (TIOP III)

Available at:
http://www.marchofdimes.com/professionals/medicalresources_tiop.html
Resource for Elective Delivery

March Of Dimes (MOD)/California Maternal Quality Care Collaborative (CMQCC) <39wk Toolkit

Available at: marchofdimes.com or CMQCC.org to download your free copy of the toolkit.
Resources for Breast Milk Feeding Promotion


- The United States Breastfeeding Committee has a toolkit available at: http://www.usbreastfeeding.org/

- The Joint Commission’s Speak Up™ Campaign
View the manual and post questions at:

http://manual.jointcommission.org
These slides are current as of (5/7/2013). The Joint Commission reserves the right to change the content of the information, as appropriate.