Maternity Practices in Infant Feeding Care – mPINC

Quality Practice Measures

Benchmark Report

2009 Survey

Facility Name
Facility Street
Facility City, State, Zip
Facility ID: Facility ID
2009 Quality Practice Measures

Summary Information

Facility Name’s Composite Quality Practice Score:

What is the mPINC Survey?

The Maternity Practices in Infant Nutrition and Care (mPINC) Survey is a national survey of infant feeding practices in facilities that provide maternity care services.

The Battelle Centers for Public Health Research and Evaluation conducted this survey for the Centers for Disease Control and Prevention (CDC) between August and December 2007, and again between August and December 2009.

Facility Name’s Composite Quality Practice Score Percentiles

United States (Among all facilities nationwide): 2 char
Statenename (Among all facilities in Statename): 2 char
Similar Size Facilities (Among all US facilities with Births_range births per year): 2 char

Facility Name reported Numbirths births in the past year; it is in the size category of Births_range births per year.

i Your facility’s percentile is the point below which the indicated percent of scores fall in each group. For example, if your National percentile is around 50, then you are performing better that about half of all facilities nationwide. If your State percentile is around 66 or 67, you are performing better than about two-thirds of the facilities in your state. If your Similar Size percentile is 99, you are performing better than almost all other facilities nationwide that perform a similar number of births per year.

ii Facility size estimates are based on annual birth census as reported by the mPINC survey respondent and/or the American Hospital Association (when respondent did not provide data).
What’s in this report?
Facility Name’s results from the 2009 CDC mPINC Survey – CDC provides this resource to help you continue to provide the best evidence-based care for your patients and improve your patients’ outcomes by considering your infant feeding care policies and practices.

- Summary Information – Examine your Composite Quality Practice Score.iii Scores range from 0 to 100, which is the highest or “best” possible score. Compare your percentile to all facilities in the US, all facilities in your state, and all facilities of similar size across the US.ii
- Care Dimension Information – Learn about your subscoresiv and percentiles in: labor and delivery care; postpartum breastfeeding assistance, contact between mother and infant, and feeding of breastfed infants; staff training; and structural and organizational aspects of care delivery. Accompanied with each score are explanations of how and why CDC chose to measure these particular practices.

Who responded to the mPINC Survey?
All facilities were surveyed that provide intrapartum care in the United States and Territories. At each facility, surveys were completed by the person most knowledgeable about the care processes and policies involved in feeding healthy infants.

The survey response rate was 82%.

Maternity Care Practices and Infant Feeding
A group of specific interventions have been identified that, when implemented together as a consistent system of care,1-3 result in better breastfeeding outcomes.4-8 This system centers on the mother and family as the locus of control in infant feeding decisions. Inpatient and ambulatory intrapartum care strategies describe how infant feeding care is delivered across the perinatal period and are designed to reduce the incidence of events and experiences that undermine mothers’ infant feeding intentions and decisions.

iii The Composite Quality Practice Score is a simple average of subscores from each care dimension.
iv The care dimension subscore is the calculated simple average of scored items within each dimension.
The key components of this care system were identified using the best available science and evidence. Like other clinical care models, this evidence spans a wide range, from results of randomized trials to expert opinion, to produce a theory of connected best practices that make up a facility’s infant feeding care system.

**Components of infant feeding care best practices**

The following key clinical care processes, policies, and staffing expectations are appropriate for care of all perinatal patients, unless medically contraindicated:

I. Labor and delivery care – Upon delivery\(^v\), the newborn is placed skin-to-skin with the mother, allowing uninterrupted time for breastfeeding.

II. Postpartum care:
   a. Feeding of breastfed infants – The breastfeeding infant is only offered pacifiers and supplements (infant formula, water, and glucose water) when medically indicated;
   b. Breastfeeding assistance – Assistance is offered to the breastfeeding mother and infant using consistent standards for supportive patient education and assessment;
   c. Contact between mother and infant – The infant is enabled to stay with the mother 24 hours per day, without unnecessary separation or restrictions.

III. Facility discharge care – The breastfeeding mother and infant are assured ambulatory breastfeeding care; patient discharge gifts contain no infant formula marketing samples.

IV. Staff training – All staff with primary responsibility for care of the breastfeeding mother and infant receive appropriate breastfeeding skills training and assessment.

V. Structural & organizational aspects of care delivery – Best practices are implemented for staffing, care process, and communication expectations in perinatal patient education and care settings; are supportive of breastfeeding employees, and are free from financial conflict of interest.

\(^v\) Immediate skin-to-skin contact and breastfeeding opportunities are possible and beneficial in both vaginal and Cesarean deliveries. These practices should be initiated within one hour of vaginal birth and within two hours of Cesarean birth.
### I. Labor and Delivery Care

<table>
<thead>
<tr>
<th>Measure</th>
<th>Rationale</th>
<th>Explanation</th>
<th>Ideal Response</th>
<th>Your Response</th>
<th>Your Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial skin-to-skin contact</td>
<td>Skin-to-skin contact improves infant ability to establish breastfeeding.</td>
<td>This measure reports how many patients experience mother-infant skin-to-skin contact for at least 30 minutes within 1 hour of uncomplicated vaginal birth.</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
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<tr>
<td></td>
<td></td>
<td>This measure reports how many patients experience mother-infant skin-to-skin contact for at least 30 minutes within 2 hours of uncomplicated Cesarean birth.</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Initial breastfeeding opportunity</td>
<td>Early initiation of breastfeeding increases overall breastfeeding duration and reduces a mother’s risk of delayed onset of milk production.</td>
<td>This measure reports what percent of patients have the opportunity to breastfeed within 1 hour of uncomplicated vaginal birth.</td>
<td>≥90</td>
<td>3 char</td>
<td>3 char</td>
</tr>
<tr>
<td></td>
<td></td>
<td>This measure reports what percent of patients have the opportunity to breastfeed within 2 hours of uncomplicated Cesarean birth.</td>
<td>≥90</td>
<td>3 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Routine procedures performed skin-to-skin</td>
<td>Performing routine newborn procedures &amp; assessments skin-to-skin increases infant stability, is safe for mother and infant, and improves breastfeeding outcomes by reducing unnecessary separation of mother and infant.</td>
<td>This measure reports how often patients have routine infant procedures performed while mother &amp; infant are skin-to-skin.</td>
<td>Almost always</td>
<td>13 char</td>
<td>3 char</td>
</tr>
</tbody>
</table>
## II. Postpartum Care –  
a. Feeding of Breastfed Infants

<table>
<thead>
<tr>
<th>Measure</th>
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</tr>
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<tbody>
<tr>
<td>Initial feeding received after birth</td>
<td>Neonatal immune system development depends on transfer of specific antibodies through colostrum and is impaired by prior introduction of non-breast milk feeds. (^{13,14})</td>
<td>This measure reports what percent of breastfeeding infants receive breast milk as their first feeding after uncomplicated vaginal birth.</td>
<td>≥90</td>
<td>3 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Supplementary feedings</td>
<td>The AAP &amp; ACOG Guidelines for Perinatal Care(^{15}) and Academy for Breastfeeding Medicine guidelines for supplementing feedings in healthy(^{16}) and hypoglycemic(^{17}) neonates all recommend against routine supplementation with formula, glucose water or water.</td>
<td>This measure reports what percent of breastfeeding infants receive non-breast milk feedings.</td>
<td>&lt;10</td>
<td>3 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Supplementary feedings</td>
<td></td>
<td>This measure reports whether breastfeeding infants receive glucose water and/or water.</td>
<td>No</td>
<td>3 char</td>
<td>3 char</td>
</tr>
</tbody>
</table>
## II. Postpartum Care –
### b. Breastfeeding Assistance

<table>
<thead>
<tr>
<th>Measure</th>
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<th>Your Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation of feeding decision</td>
<td>Standard documentation of infant feeding decisions is important in order to adequately support maternal choice.(^{18})</td>
<td>This measure reports how often infant feeding decisions are documented in medical records.</td>
<td>Almost always</td>
<td>13 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Breastfeeding advice &amp; counseling</td>
<td>The AAP recommends pediatricians provide parents with complete, current information on the benefits and methods of breastfeeding to ensure that the feeding decision is a fully informed one.(^{19}) Patient education is important in order to establish breastfeeding.(^{20,21})</td>
<td>Effective breastfeeding relies on feeding in direct response to specific infant cues rather than scheduled frequency or duration of feedings.(^{22}) This measure reports how many patients who are breastfeeding, or intend to breastfeed, are provided advice &amp; instructions about breastfeeding.</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Assessment &amp; observation of breastfeeding sessions</td>
<td>The AAP recommends formal evaluation of breastfeeding performance by trained observers during the first 24-48 hours of life.(^{19}) Standardized breastfeeding assessment tools improve comparability &amp; validity of findings.(^{23-25})</td>
<td>This measure reports how many patients are taught to recognize &amp; respond to infants’ cues instead of feeding on a set schedule. This measure reports how often breastfeeding patients receive instructions to limit suckling at the breast to a specific length of time.</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Pacifier use</td>
<td>In-hospital pacifier use reduces duration of exclusive breastfeeding.(^{26})</td>
<td>This measure reports how many breastfeeding patients are given pacifiers by facility staff.</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
</tr>
</tbody>
</table>
II. Postpartum Care –
   c. Contact Between Mother and Infant

<table>
<thead>
<tr>
<th>Measure</th>
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<th>Subscore</th>
</tr>
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</table>
| Separation of mother and newborn during transition to receiving units | Separation during transition to postpartum care is unnecessary for stable patients. Mother-infant contact is important during this time to establish breastfeeding, maintain infant weight, and improve regulation of infants’ neurologic states.  
22 | This measure reports how many minutes mother-infant pairs are separated after uncomplicated vaginal births during the transition from labor and delivery care to their receiving patient care units. | No separation 13 char 3 char |
| Patient rooming-in | Rooming-in of mother-infant pairs increases infants’ opportunities to learn to breastfeed  
28 & increases duration & quality of maternal sleep.  
29 | This measure reports how many hours breastfeeding mother-infant pairs are separated at night. | No separation 13 char 3 char |
| Instances of mother infant separation | Understanding the reasons mother-infant pairs are separated  
30 helps identify opportunities to reduce unnecessary separations. Bringing the infant to the mother to breastfeed is important because it reduces chances the infant will receive supplemental feeds.  
31,32 | This measure reports the number of reasons that infant patients are removed from mothers’ rooms. | 0 2 char 3 char |
|  |  | This measure reports how many patients who are not rooming-in receive their infant from the nursery for breastfeeding at night. | Most 8 char 3 char |
### III. Facility Discharge Care

<table>
<thead>
<tr>
<th>Measure</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Assurance of ambulatory breastfeeding support</td>
<td>The AAP clinical practice guidelines recommend examination of all infants by a qualified health care professional within 48 hours of hospital discharge to assess breastfeeding. Ensuring post discharge ambulatory support improves breastfeeding outcomes.</td>
<td>This measure reports how many modes of post-discharge breastfeeding support patients are offered: Physical Contact – Home/hospital visit; Active Reaching Out – Phone call to patient; Referral – Providing information about: Available phone numbers, support groups, lactation consultant/specialist, WIC, outpatient clinics.</td>
<td>All 3 modes</td>
<td>13 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Distribution of “discharge packs” containing infant formula</td>
<td>The AAP and ACOG recommend against distributing infant formula “discharge packs” because it reduces exclusive breastfeeding rates and implies health care professional endorsement of specific commercial items.</td>
<td>This measure reports whether breastfeeding patients are given “discharge packs” containing product marketing infant formula samples.</td>
<td>No</td>
<td>3 char</td>
<td>3 char</td>
</tr>
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</table>
### IV. Staff Training

<table>
<thead>
<tr>
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<tr>
<td>Preparation of new staff</td>
<td>Staff training ensures standard capacity to provide evidence-based care, learn about new information, and maintain patient support skills. Standard 18 hour staff training improves patient breastfeeding outcomes facility-wide.</td>
<td>This measure reports how many hours of breastfeeding education are received by new nurses &amp; other birth attendants*.</td>
<td>&gt;18</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Continuing education</td>
<td>This measure reports how many hours of breastfeeding education current nurses &amp; other birth attendants* received in the past year.</td>
<td>≥5</td>
<td>≥5</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td></td>
<td>This measure reports how many nurses &amp; other birth attendants* received any breastfeeding education in the past year.</td>
<td>Most</td>
<td>Most</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Competency assessment</td>
<td>This measure reports how often nurses &amp; other birth attendants* are assessed for competency in breastfeeding management &amp; support.</td>
<td>At least once a year</td>
<td>At least once a year</td>
<td>21 char</td>
<td>3 char</td>
</tr>
</tbody>
</table>

* In free-standing birth centers, these questions were asked among “birth attendants” to accommodate the range of attendants to births in these facilities.
### V. Structural and Organizational Aspects of Care Delivery

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Breastfeeding policy</td>
<td>The AAP recommends inclusion of specific elements in facility breastfeeding policies. The Academy of Breastfeeding Medicine’s clinical protocol lists components of a model breastfeeding policy.</td>
<td>This measure reports the number of model breastfeeding policy elements in your facility’s breastfeeding policy.</td>
<td>10</td>
<td>2 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Communication of breastfeeding policy</td>
<td>Effective intra-professional communication increases the likelihood that a facility’s breastfeeding policy will be implemented appropriately.</td>
<td>This measure reports the modes used to inform staff about breastfeeding policies: In person – In-service training, new staff orientation, new staff training, staff meeting; Printed/online materials – Policy posted, newsletter.</td>
<td>Both modes</td>
<td>36 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Infant feeding documentation policy</td>
<td>Standardized documentation of patient decisions allows for valid internal assessment, monitoring and improvement of quality of care, and improves staff collaboration &amp; support of patients’ decisions.</td>
<td>This measure reports your facility’s policy for documentation of patient infant feeding plans and practices.</td>
<td>Any point during or post-stay</td>
<td>29 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Employee breastfeeding support</td>
<td>The AMA and AWHONN recommend medical facilities support all lactating employees by providing appropriate time and facilities to express and store milk during the working day. The US Breastfeeding Committee recommends specific workplace supports.</td>
<td>This measure reports how many supports are provided to lactating staff: Critical supports- Room to express milk, electric breast pump for staff use, permission to express milk on breaks; Additional supports – On-site child care, breastfeeding support group for staff, access to lactation consultant/specialist, paid maternity leave other than accrued leave.</td>
<td>3 critical</td>
<td>23 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Facility receipt of free infant formula</td>
<td>The ADA guidelines for mandatory elements of infant formula HACCP plans apply to purchased and free infant formula. The AMA recognizes the inherent conflict of interest this kind of financial support introduces.</td>
<td>This measure reports whether your facility receives infant formula free of charge from manufacturers.</td>
<td>No</td>
<td>8 char</td>
<td>3 char</td>
</tr>
<tr>
<td>Prenatal breastfeeding instruction</td>
<td>Patient education about breastfeeding is important because it improves breastfeeding rates.\textsuperscript{20}</td>
<td>This measure reports whether breastfeeding is a component of prenatal patient education opportunities.</td>
<td>Yes</td>
<td>11 char</td>
<td>3 char</td>
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<tr>
<td>Coordination of lactation care</td>
<td>A designated Lactation Coordinator demonstrates a facility’s consideration of lactation support as an essential and necessary function of intrapartum care.\textsuperscript{57}</td>
<td>This measure reports whether your facility has a designated person who oversees lactation care within the facility.</td>
<td>Yes</td>
<td>3 char</td>
<td>3 char</td>
</tr>
</tbody>
</table>
Next Steps
Examine the care dimension that was the most problematic in your facility compared to others in your state and choose one care process or policy to begin improving. For example:

Example Improvement Opportunities
I. Labor and delivery care – Reduce delays in first contact and breastfeeding opportunities.
II. Postpartum care:
   a. Feeding of breastfed infants – Eliminate unnecessary supplementation;
   b. Breastfeeding assistance – Improve patient education and assistance; and
   c. Contact between mother and infant – Eliminate unnecessary separations between mothers and infants.
III. Facility discharge care – Ensure compliance with AAP clinical practice recommendations.
IV. Staff training – Facilitate staff training on breastfeeding management and support.
V. Structural & organizational aspects of care delivery – Improve your facility’s policies related to breastfeeding.
References Cited


For more information visit:
www.cdc.gov/mpinc
Division of Nutrition, Physical Activity, and Obesity
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, GA  USA

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