

Calculation of Item Scores: 2009 Survey of Maternity Practices in Infant Nutrition and Care (mPINC Survey)

Overall Maternity Practices Score

Variable name for OVERALL MATERNITY PRACTICES SCORE: Total\_score

Mean of the 7 subscale scores.

Labor and Delivery Care Subscore

| Measure   | Explanation  | Item | Scoring algorithm  |
|---|--|------|--|
| Initial skin-to-skin contact                                    | Reports how many patients experience mother-infant skin-to-skin contact for at least 30 minutes within 1 hour of uncomplicated vaginal birth.    | A5   | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
|   | Reports how many patients experience mother-infant skin-to-skin contact for at least 30 minutes within 2 hours for uncomplicated cesarean birth. | A11  | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
| Initial breastfeeding opportunity                               | Reports what percent of patients have the opportunity to breastfeed within 1 hour of uncomplicated vaginal birth                                 | A6   | 100=90%+<br>70=50-89%<br>30=10-49%<br>0=0-9%   |
|   | Reports what percent of patients have the opportunity to breastfeed within 2 hours of uncomplicated cesarean birth.                              | A12  | 100=90%+<br>70=50-89%<br>30=10-49%<br>0=0-9%   |
| Routine procedures performed skin-to-skin                       | Reports how often patients have routine infant procedures performed while mother and infant are skin-to-skin.                                    | A4   | 100=Almost Always<br>70=Often<br>30=Sometimes<br>0=Rarely                                  |
| <b>Labor and Delivery Care Subscale Score: LabDel_score</b>     |  |      | Mean of the 5 item scores  |
| <b>Labor and Delivery Care national percentile: LabDel_natl</b> |  |      | Percentile rank of all scores in nation  |
| <b>Labor and Delivery Care state percentile: LabDel_state</b>   |  |      | Percentile rank of all scores in state   |
| <b>Labor and Delivery Care size percentile: LabDel_size</b>     |  |      | Percentile rank of all scores among facilities reporting similar number of births per year |

Feeding of Breastfed Infants

| Measure  | Explanation   | Item | Scoring algorithm  |
|--|---|------|--|
| Initial feeding received after birth                                 | Reports what percent of breastfeeding patients receive breast milk as their first feeding after uncomplicated vaginal birth.  | A7   | 100=90%+<br>70=50-89%<br>30=10-49%<br>0=0-9%   |
|  | Reports what percent of breastfeeding patients receive breast milk as their first feeding after uncomplicated cesarean birth. | A13  | 100=90%+<br>70=50-89%<br>30=10-49%<br>0=0-9%   |
| Supplementary feedings   | Reports what percent of breastfeeding infants receive non-breast milk feedings.   | A20  | 100=0-9%<br>70=10-49%<br>30=50-89%<br>0=90%+   |
|  | Reports whether breastfeeding patients receive glucose water and/or water.  | A21  | 100=Answer to both is No 0=At least one answer is Yes                                      |
| <b>Feeding of Breastfed Infants Subscale Score: FeedBF_score</b>     |   |      | Mean of the 4 item scores  |
| <b>Feeding of Breastfed Infants national percentile: FeedBF_natl</b> |   |      | Percentile rank of all scores in nation  |
| <b>Feeding of Breastfed Infants state percentile: FeedBF_state</b>   |   |      | Percentile rank of all scores in state   |
| <b>Feeding of Breastfed Infants size percentile: FeedBF_size</b>     |   |      | Percentile rank of all scores among facilities reporting similar number of births per year |

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**Breastfeeding Assistance**

| <i>Measure</i>   | <i>Explanation</i>   | <i>Item</i> | <i>Scoring algorithm</i>   |
|--|--|-------------|--|
| Documentation of feeding decision                                  | Reports how often infant feeding decisions are documented in hospital records.   | A3          | 100=Almost Always<br>70=Often<br>30=Sometimes<br>0=Rarely                                  |
| Breastfeeding advice & counseling                                  | Reports how many patients who are breastfeeding or intend to breastfeed are provided advice and instructions about breastfeeding.        | A15         | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
|  | Reports how many breastfeeding patients are taught to recognize and respond to infant feeding cues instead of feeding on a set schedule. | A16         | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
|  | Reports how often breastfeeding patients receive instructions to limit suckling at the breast to a specific length of time.              | A17         | 100=Rarely<br>70=Sometimes<br>30=Often<br>0=Almost always                                  |
| Assessment & observation of breastfeeding sessions                 | Reports how many breastfeeding patients received a directly observed breastfeeding assessment by hospital staff.                         | A18         | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
|  | Reports whether breastfeeding is assessed using a standardized or adapted assessment tool.   | A19         | 100=Yes<br>0=No  |
| Pacifier use   | Reports how many breastfeeding patients are given pacifiers by hospital staff.   | A24         | 100=Few<br>70=Some<br>30=Many<br>0=Most  |
| <b>Breastfeeding Assistance Score: BFAssist_score</b>              |  |             | Mean of the 7 item scores.   |
| <b>Breastfeeding Assistance national percentile: BFAssist_natl</b> |  |             | Percentile rank of all scores in nation  |
| <b>Breastfeeding Assistance state percentile: BFAssist_state</b>   |  |             | Percentile rank of all scores in state   |
| <b>Breastfeeding Assistance size percentile: BFAssist_size</b>     |  |             | Percentile rank of all scores among facilities reporting similar number of births per year |

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**Contact Between Mother and Infant**

| <i>Measure</i>   | <i>Explanation</i>  | <i>Item</i> | <i>Scoring algorithm</i>   |
|--|---|-------------|--|
| Separation of mother & infant during transition                            | Reports how many minutes mother-infant patient pairs are separated after uncomplicated vaginal births during the transition from labor and delivery care to their receiving patient care units.   | A08a        | 100: No separation<br>90: ≤30<br>70: 31-60<br>30: 61-90<br>0: >90                          |
| Patient rooming-in   | Reports how many hours breastfeeding mother-infant patient pairs are separated at night.  | A28         | 100: No separation<br>90: <3<br>70: 3-<5<br>30: 5-<8<br>0: ≥8                              |
|  | Reports what percent of mother-infant patient pairs room together ≥23 hours per day.  | A31         | 100=90%+<br>70=50-89%<br>30=10-49%<br>0=0-9%   |
| Instances of mother-infant separation                                      | Reports the number of reasons that infant patients are removed from mothers' rooms. Potential reasons for removal included: pediatric rounds, change of shift, visiting hours, hearing test, heel stick, infant photos, infant's bath, mother bathing, mother out of room. Only "mother bathing" and "mother out of room" were considered valid reasons for mother-infant separation. Individual reasons are counted (Few infants removed for the reason=0; Some/Many/Most infants removed for the reason=1) and then summed. | A30         | 100=0<br>70=1-3<br>30=4-6<br>0=7   |
|  | Reports how many breastfeeding patients who are not rooming-in receive their infant from the nursery for breastfeeding at night.  | A29         | 100=Most or All<br>70=Many<br>30=Some<br>0=Few   |
| <b>Contact Between Mother and Infant Subscale Score: Contact_score</b>     |   |             | Mean of the 5 item scores  |
| <b>Contact Between Mother and Infant national percentile: Contact_natl</b> |   |             | Percentile rank of all scores in nation  |
| <b>Contact Between Mother and Infant state percentile: Contact_state</b>   |   |             | Percentile rank of all scores in state   |
| <b>Contact Between Mother and Infant size percentile: Contact_size</b>     |   |             | Percentile rank of all scores among facilities reporting similar number of births per year |

**Facility Discharge Care**

| <i>Measure</i>  | <i>Explanation</i>  | <i>Item</i> | <i>Scoring algorithm</i>  |
|---|---|-------------|---|
| Assurance of ambulatory breastfeeding support               | Reports how many modes of post-discharge breastfeeding support patients are offered. To get credit for the mode, at least one support strategy within the mode had to be reported. Mode 1=Physical Contact (strategies: home visit, hospital postpartum followup visit); Mode 2=Active Reaching Out (strategy: followup phone call to patient after discharge); Mode 3=Referrals (strategies: hospital phone number to call, hospital-based support group, other breastfeeding support group, lactation consultant/specialist, WIC, outpatient clinic). | A33         | 100=All 3 modes<br>90=Modes 1 and 2<br>75=Modes 1 and 3<br>65=Mode 1 only<br>35=Modes 2 and 3<br>25=Mode 2 only<br>10=Mode 3 only<br>0=No modes |
| Distribution of "discharge packs" containing infant formula | Reports whether breastfeeding patients are given "discharge packs" containing product marketing infant formula samples.   | A32         | 100=No<br>0=Yes   |
| <b>Facility Discharge Care Subscale Score: Dx_score</b>     |   |             | Mean of the 2 item scores   |
| <b>Facility Discharge Care national percentile: Dx_natl</b> |   |             | Percentile rank of all scores in nation   |
| <b>Facility Discharge Care state percentile: Dx_state</b>   |   |             | Percentile rank of all scores in state  |
| <b>Facility Discharge Care size percentile: Dx_size</b>     |   |             | Percentile rank of all scores among facilities reporting similar number of births per year  |

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| <b>Staff Training Measure</b>                         | <b>Explanation</b>  | <b>Item</b> | <b>Scoring algorithm</b>   |
|---|---|-------------|--|
| Preparation of new staff                              | Reports how many hours of breastfeeding education are received by new nurses and other birth attendants <sup>†</sup> .                | B1          | 100: 18+<br>75: 8 to 17<br>50: 4 to 7<br>25: 1 to 3<br>0: <1                               |
| Continuing education                                  | Reports how many hours of breastfeeding education current nurses and other birth attendants <sup>†</sup> received in the past year.   | B5          | 100: 5+<br>50: 1 to 4<br>0: <1   |
|   | Reports how many nurses and other birth attendants <sup>†</sup> received any breastfeeding education in the past year.                | B4          | 100=Most<br>70=Many<br>30=Some<br>0=Few  |
| Competency assessment                                 | Reports how often nurses and other birth attendants <sup>†</sup> are assessed for competency in breastfeeding management and support. | B3          | 100: At least once a year<br>50: Less than once a year<br>0: Not assessed                  |
| <b>Staff Training Subscale Score: Train_score</b>     |   |             | Mean of the 4 item scores  |
| <b>Staff Training national percentile: Train_natl</b> |   |             | Percentile rank of all scores in nation  |
| <b>Staff Training state percentile: Train_state</b>   |   |             | Percentile rank of all scores in state   |
| <b>Staff Training size percentile: Train_size</b>     |   |             | Percentile rank of all scores among facilities reporting similar number of births per year |

<sup>†</sup>In free-standing birth centers, these questions were asked among "birth attendants" to accommodate the range of attendants to births in these facilities.

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**Structural and Organizational Aspects of Care Delivery**

| <i>Measure</i>  | <i>Explanation</i>   | <i>Item</i> | <i>Scoring algorithm</i>  |
|---|--|-------------|---|
| Breastfeeding policy  | Reports the number of model written breastfeeding policy elements in the facility's communication of breastfeeding policy. Aspects include: a) in-service training; b) prenatal breastfeeding classes; c) asking about mothers' feeding plans; d) initiating breastfeeding w/in 60 mins of uncomplicated vaginal birth; e) initiating breastfeeding after recovery for uncomplicated c-sections; f) showing mothers how to express milk and maintain lactation if separated from infant; g) giving only breast milk to breastfed infants; h) 24 hr / day rooming-in; i) breastfeeding on-demand and duration and frequency of feedings; j) pacifier use by breastfed infants; k) referral of mothers with breastfeeding problems; l) referral of mothers to appropriate community breastfeeding resources at discharge. Aspects worth 10 points each except: 10 points given for 'd' and/or 'e'; 10 points given for 'k' and/or 'l'. | B11         | 100=10<br>90=9<br>80=8<br>70=7<br>60=6<br>50=5<br>40=4<br>30=3<br>20=2<br>10=1<br>0=0   |
| Communication of breastfeeding policy                                   | Reports how staff are informed about breastfeeding policies. Strategies for informing staff were divided into two modes - "in person" and "printed / online materials." Strategies categorized as being "in person" included: in-service training, new staff orientation, new staff training, and staff meeting. Strategies categorized as being "printed / online materials" included: policy is posted and newsletter. At least one strategy from the mode had to be reported for the mode to be counted.  | B12         | 100=In person & printed/online materials<br>70=In person only<br>30=Printed/online materials only<br>0=None   |
| Infant feeding documentation policy                                     | Reports the hospital's policy for documentation of patient infant feeding plans and practices.   | C6          | 100=Any point during or post-stay<br>25=At admission only<br>0=No / not sure  |
| Employee breastfeeding support  | Reports how many of 3 critical and 4 additional supports are provided to lactating staff after returning to work. Critical supports are: room to express milk [a]; electric breast pump for staff use [c]; permission to use work breaks to express milk [d]. Additional supports are: on-site child care [b]; breastfeeding support group for staff [e]; lactation consultant/specialist available for consult [f]; paid maternity leave other than accrued vacation or sick leave [g]. If yes to all 3 critical supports: 100. If yes to ≤2 critical supports, 35 points for each critical support and 5 points for each additional support. 0=no to all supports  | B13         | 100=All 3 critical (with or without any additional)<br>90=2 critical, 4 additional<br>85=2 critical, 3 additional<br>80=2 critical, 2 additional<br>75=2 critical, 1 additional<br>70=2 critical, 0 additional<br>55=1 critical, 4 additional<br>50=1 critical, 3 additional<br>45=1 critical, 2 additional<br>40=1 critical, 1 additional<br>35=1 critical, 0 additional<br>20=0 critical, 4 additional<br>15=0 critical, 3 additional<br>10=0 critical, 2 additional<br>5=0 critical, 1 additional<br>0=No supports |
| Facility receipt of free infant formula                                 | Reports whether the facility receives infant formula free of charge from manufacturers.  | A25         | 100=No<br>0=Yes / Not sure  |
| Prenatal breastfeeding instruction                                      | Reports whether breastfeeding is a component of prenatal patient education opportunities.  | A01         | 100=Yes<br>0=No / Not Sure  |
| Coordination of lactation care  | Reports whether the facility has a designated person who oversees lactation care within the facility.  | B08         | 100=Yes<br>0=No   |
| <b>Structural &amp; Organizational Subscale Score: Struct_score</b>     |  |             | Mean of the 7 item scores   |
| <b>Structural &amp; Organizational national percentile: Struct_natl</b> |  |             | Percentile rank of all scores in nation   |
| <b>Structural &amp; Organizational state percentile: Struct_state</b>   |  |             | Percentile rank of all scores in state  |
| <b>Structural &amp; Organizational size percentile: Struct_size</b>     |  |             | Percentile rank of all scores among facilities reporting similar number of births per year  |

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