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

Overall Materity 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 70=Many 30=Some 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 70=Many 30=Some 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%+ 70=50-89% 30=10-49% 0=0-9%
	Reports what percent of patients have the opportunity to breastfeed within 2 hours of uncomplicated cesarean birth.	A12	100=90%+ 70=50-89% 30=10-49% 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 70=Often 30=Sometimes 0=Rarely
		Labor and Delivery Care Subscale Score: LabDel_score	Mean of the 5 item scores
		Labor and Delivery Care national percentile: LabDel_natl	Percentile rank of all scores in nation
		Labor and Delivery Care state percentile: LabDel_state	Percentile rank of all scores in state
		Labor and Delivery Care size percentile: LabDel_size	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%+ 70=50-89% 30=10-49% 0=0-9%
	Reports what percent of breastfeeding patients receive breast milk as their first feeding after uncomplicated cesarean birth.	A13	100=90%+ 70=50-89% 30=10-49% 0=0-9%
Supplementary feedings	Reports what percent of breastfeeding infants receive non-breast milk feedings.	A20	100=0-9% 70=10-49% 30=50-89% 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
		Feeding of Breastfed Infants Subscale Score: FeedBF_score	Mean of the 4 item scores
		Feeding of Breastfed Infants national percentile: FeedBF_natl	Percentile rank of all scores in nation
		Feeding of Breastfed Infants state percentile: FeedBF_state	Percentile rank of all scores in state
		Feeding of Breastfed Infants size percentile: FeedBF_size	Percentile rank of all scores among facilities reporting similar number of births per year

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Breastfeeding Assistance

Measure	*Explanation*	*Item*	*Scoring algorithm*
Documentation of feeding decision	Reports how often infant feeding decisions are documented in hospital records.	A3	100=Almost Always 70=Often 30=Sometimes 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 70=Many 30=Some 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 70=Many 30=Some 0=Few
	Reports how often breastfeeding patients receive instructions to limit suckling at the breast to a specific length of time.	A17	100=Rarely 70=Sometimes 30=Often 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 70=Many 30=Some 0=Few
	Reports whether breastfeeding is assessed using a standardized or adapted assessment tool.	A19	100=Yes 0=No
Pacifier use	Reports how many breastfeeding patients are given pacifiers by hospital staff.	A24	100=Few 70=Some 30=Many 0=Most
		Breastfeeding Assistance Score: BFAssist_score	Mean of the 7 item scores.
		Breastfeeding Assistance national percentile: BFAssist_natl	Percentile rank of all scores in nation
		Breastfeeding Assistance state percentile: BFAssist_state	Percentile rank of all scores in state
		Breastfeeding Assistance size percentile: BFAssist_size	Percentile rank of all scores among facilities reporting similar number of births per year

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Contact Between Mother and Infant

Measure	*Explanation*	*Item*	*Scoring algorithm*
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 90: ≤30 70: 31-60 30: 61-90 0: >90
Patient rooming-in	Reports how many hours breastfeeding mother-infant patient pairs are separated at night.	A28	100: No separation 90: <3 70: 3-<5 30: 5-<8 0: ≥8
	Reports what percent of mother-infant patient pairs room together ≥23 hours per day.	A31	100=90%+ 70=50-89% 30=10-49% 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 70=1-3 30=4-6 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 70=Many 30=Some 0=Few
	Contact Between Mother and Infant Subscale Score: Contact_score		Mean of the 5 item scores
	Contact Between Mother and Infant national percentile: Contact_natl		Percentile rank of all scores in nation
	Contact Between Mother and Infant state percentile: Contact_state		Percentile rank of all scores in state
	Contact Between Mother and Infant size percentile: Contact_size		Percentile rank of all scores among facilities reporting similar number of births per year

Facility Discharge Care

Measure	*Explanation*	*Item*	*Scoring algorithm*
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 90=Modes 1 and 2 75=Modes 1 and 3 65=Mode 1 only 35=Modes 2 and 3 25=Mode 2 only 10=Mode 3 only 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 0=Yes
	Facility Discharge Care Subscale Score: Dx_score		Mean of the 2 item scores
	Facility Discharge Care national percentile: Dx_natl		Percentile rank of all scores in nation
	Facility Discharge Care state percentile: Dx_state		Percentile rank of all scores in state
	Facility Discharge Care size percentile: Dx_size		Percentile rank of all scores among facilities reporting similar number of births per year

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Staff Training

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

†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

Measure	*Explanation*	*Item*	*Scoring algorithm*
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 90=9 80=8 70=7 60=6 50=5 40=4 30=3 20=2 10=1 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 70=In person only 30=Printed/online materials only 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 25=At admission only 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) 90=2 critical, 4 additional 85=2 critical, 3 additional 80=2 critical, 2 additional 75=2 critical, 1 additional 70=2 critical, 0 additional 55=1 critical, 4 additional 50=1 critical, 3 additional 45=1 critical, 2 additional 40=1 critical, 1 additional 35=1 critical, 0 additional 20=0 critical, 4 additional 15=0 critical, 3 additional 10=0 critical, 2 additional 5=0 critical, 1 additional 0=No supports
Facility receipt of free infant formula	Reports whether the facility receives infant formula free of charge from manufacturers.	A25	100=No 0=Yes / Not sure
Prenatal breastfeeding instruction	Reports whether breastfeeding is a component of prenatal patient education opportunities.	A01	100=Yes 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 0=No
		Structural & Organizational Subscale Score: Struct_score	Mean of the 7 item scores
		Structural & Organizational national percentile: Struct_natl	Percentile rank of all scores in nation
		Structural & Organizational state percentile: Struct_state	Percentile rank of all scores in state
		Structural & Organizational size percentile: Struct_size	Percentile rank of all scores among facilities reporting similar number of births per year

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