Maternity Practices in Infant Nutrition and Care In **Minnesota** —2009 mPINC Survey

This report provides data from the 2009 mPINC survey for Minnesota. It describes specific opportunities to improve mother-baby care at hospitals and birth centers in Minnesota in order to more successfully meet national quality of care standards for perinatal care.

More information is at www.cdc.gov/mpinc

Breastfeeding is a National Priority

Breastfeeding is associated with decreased risk for infant morbidity and mortality as well as maternal morbidity,[1] and provides optimal infant nutrition. *Healthy People 2020*[2] establishes breastfeeding initiation, continuation, and exclusivity as national priorities.

Changes in Maternity Care Practices Improve Breastfeeding Rates

Maternity practices in hospitals and birth centers can influence breastfeeding behaviors during a period critical to successful establishment of lactation.[3] Abundant literature, including a Cochrane review, document that institutional changes in maternity care practices to make them more supportive of breastfeeding increase initiation and continuation of breastfeeding.[4]

Breastfeeding Support in **Minnesota** Facilities

Strengths

Availability of Prenatal Breastfeeding Instruction Most facilities (97%) in Minnesota include breastfeeding education as a routine element of their prenatal classes.	Prenatal education about breastfeeding is important because it provides mothers with a better understanding of the benefits and requirements of breastfeeding, resulting in improved breastfeeding rates.
Provision of Breastfeeding Advice and Counseling Staff at 91% of facilities in Minnesota provide breastfeeding advice and instructions to patients who are breastfeeding, or intend to breastfeed.	The American Academy of Pediatrics (AAP) recommends pediatricians provide patients with complete, current information on the benefits and methods of breastfeeding to ensure that the feeding decision is a fully informed one. Patient education is important in order to establish breastfeeding.

Needed Improvements

Appropriate Use of Breastfeeding Supplements Only 30% of facilities in Minnesota adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water.	The American Academy of Pediatrics (AAP) and the American College of Obstetricians and Gynecologists (ACOG) Guidelines for Perinatal Care recommend against routine supplementation because supplementation with formula and/or water makes infants more likely to receive formula at home and stop breastfeeding prematurely.
Inclusion of Model Breastfeeding Policy Elements Only 12% of facilities in Minnesota have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM).	The ABM model breastfeeding policy elements are the result of extensive research on best practices to improve breastfeeding outcomes. Facility policies determine the nature of care that is available to patients. Facilities with comprehensive policies consistently have the highest rates of exclusive breastfeeding, regardless of patient population characteristics such as ethnicity, income, and payer status.
Adequate Assessment of Staff Competency Only 22% of facilities in Minnesota annually assess staff competency for basic breastfeeding management and support.	Implementing comprehensive assessment of staff training and skills for basic breastfeeding management and support establishes the foundation for quality infant feeding care. Adequate training and skills assessment are critical to ensure that mothers and infants receive care that is consistent, evidence-based, and appropriate.
Use of Combined Mother/Baby Postpartum Care Only 19% of facilities in Minnesota report that most healthy full-term infants remain with their mothers for at least 23 hours per day throughout the hospital stay.	Mother-infant contact during the hospital stay helps establish breastfeeding and maintain infant weight, temperature, and health. Rooming-in increases breastfeeding learning opportunities and duration and quality of maternal sleep, and reduces supplemental feeds.

Every two years, CDC administers the national Maternity Practices in Infant Nutrition and Care (mPINC) survey to all hospitals and birth centers in the U.S. that provide maternity care.

Data from this survey can be used to establish evidence-based, breastfeeding-supportive maternity practices as standards of care in hospitals and birth centers across the US. Improved care will help meet *Healthy People 2020* breastfeeding objectives and will help improve maternal and child health nationwide.

National Center for Chronic Disease Prevention and Health Promotion
Division of Nutrition, Physical Activity, and Obesity

Minnesota Summary —2009 mPINC Survey

Survey Method At each facility, the person who is the most knowledgeable about the facility's maternity practices related to healthy newborn feeding and care completes the CDC mPINC survey.

Response Rate 88% of the 99 eligible facilities in Minnesota responded to the 2009 mPINC Survey. Each participating facility received its facility-specific mPINC benchmarking report in March 2011.

Minnesota's Composite Quality Practice Score* **67** (out of 100)

Minnesota's Composite Rank† **17** (out of 52)

mPINC Dimension of Care	MN Quality Practice Subscore*	Ideal Response to mPINC Survey Question	Percent of MN Facilities with Ideal Response	MN Item Rank†
Labor and Delivery Care	71	Initial skin-to-skin contact is ≥30 min w/in 1 hour (vaginal births)	46	21
		Initial skin-to-skin contact is ≥30 min w/in 2 hours (cesarean births)	38	18
		Initial breastfeeding opportunity is w/in 1 hour (vaginal births)	54	24
		Initial breastfeeding opportunity is w/in 2 hours (cesarean births)	60	8
		Routine procedures are performed skin-to-skin	24	18
Feeding of Breastfed Infants	81	Initial feeding is breast milk (vaginal births)	86	10
		Initial feeding is breast milk (cesarean births)	83	7
		Supplemental feedings to breastfeeding infants are rare	30	12
		Water and glucose water are not used	62	42
Breastfeeding Assistance	85	Infant feeding decision is documented in the patient chart	98	-
		Staff provide breastfeeding advice & instructions to patients	91	-
		Staff teach breastfeeding cues to patients	80	32
		Staff teach patients not to limit suckling time	40	29
		Staff directly observe & assess breastfeeding	89	14
		Staff use a standard feeding assessment tool	74	9
		Staff rarely provide pacifiers to breastfeeding infants	29	25
Contact Between Mother and Infant	71	Mother-infant pairs are not separated for postpartum transition	71	15
		Mother-infant pairs room-in at night	61	40
		Mother-infant pairs are not separated during the hospital stay	19	39
		Infant procedures, assessment, and care are in the patient room	2	22
		Non-rooming-in infants are brought to mothers at night for feeding	88	15
Facility Discharge Care	55	Staff provide appropriate discharge planning (referrals & other multi-modal support)	33	12
		Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients	44	14
Staff Training	43	New staff receive appropriate breastfeeding education	5	37
		Current staff receive appropriate breastfeeding education	15	19
		Staff received breastfeeding education in the past year	32	36
		Assessment of staff competency in breastfeeding management & support is at least annual	22	50
Structural & Organizational Aspects of Care Delivery	65	Breastfeeding policy includes all 10 model policy elements	12	26
		Breastfeeding policy is effectively communicated	74	25
		Facility documents infant feeding rates in patient population	54	45
		Facility provides breastfeeding support to employees	54	34
		Facility does not receive infant formula free of charge	7	25
		Breastfeeding is included in prenatal patient education	97	-
		Facility has a designated staff member responsible for coordination of lactation care	70	28

* Quality Practice scores range from 0 to 100 for each question, dimenstion of care, facility, and state. The highest, best possible score for each is 100. Each facility and state's "Composite Quality Practice Score" is made up of subscores for practices in each of 7 dimensions of care.

† Ranks range from 1 to 52, with 1 being the highest rank. In case of a tie, both are given the same rank.

- State ranks are not shown for survey questions with 90% or more facilities reporting ideal responses.

Improvement is Needed in Maternity Care Practices and Policies in Minnesota.

Many opportunities exist to protect, promote, and support breastfeeding mothers and infants in Minnesota.

Take action on this critical need—consider the following:

- ☑ Examine Minnesota regulations for maternity facilities and evaluate their evidence base; revise if necessary.
- ☑ Sponsor a Minnesota-wide summit of key decision-making staff at maternity facilities to highlight the importance of evidence-based practices for breastfeeding.
- ☑ Pay for hospital staff across Minnesota to participate in 18-hour training courses in breastfeeding.
- ☑ Establish links among maternity facilities and community breastfeeding support networks in Minnesota.
- ☑ Identify and implement programs within hospital settings—choose one widespread practice and adjust it to be evidence-based and supportive of breastfeeding.
- ☑ Integrate maternity care into related hospital-wide Quality Improvement efforts across Minnesota.
- ☑ Promote Minnesota-wide utilization of the Joint Commission's Perinatal Care Core Measure Set including exclusive breastfeeding at discharge in hospital data collection.

Questions about the mPINC survey?

Information about the mPINC survey, benchmark reports, scoring methods, and complete references are available at: www.cdc.gov/mpinc

For more information:
Division of Nutrition, Physical Activity, and Obesity
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References

[1] Ip S, Chung M, Raman G, et al. Breastfeeding and maternal and infant health outcomes in developed countries. Rockville, MD: US Dept of Health and Human Services, Agency for Healthcare Research and Quality; 2007.

[2] US Dept of Health and Human Services. Healthy People 2020 Summary of Objectives: Maternal, Infant, and Child Health. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/MaternalChildHealth.pdf

[3] DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of maternity care practices on breastfeeding. Pediatrics 2008;122, Supp 2:S43-9.

[4] Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Snowden AJ, Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. Health Technology Assessment 2000;4:1-171.