Maternity Practices in Infant Nutrition and Care in Oklahoma

This report describes specific opportunities to improve mother-baby care at hospitals and birth centers in Oklahoma in order to more successfully meet national quality of care standards for perinatal care.

In 2007, CDC administered the first national **M**aternity **P**ractices in **I**nfant **N**utrition and **C**are ("mPINC") survey. All hospitals and birth centers in the U.S. that provide maternity care were invited to participate.

Visit **www.cdc.gov/mpinc** for more information about the survey.

Changes in Maternity Care Practices Improve Breastfeeding Rates

Breastfeeding provides optimal nutrition for infants and is associated with decreased risk for infant morbidity and mortality as well as maternal morbidity.[1] Maternity practices in hospitals and birth centers can influence breastfeeding behaviors during a period critical to successful establishment of lactation.[2] The literature, including a Cochrane review, found that institutional changes in maternity care practices to make them more supportive of breastfeeding increased initiation and duration of breastfeeding.[3]

Strengths in Breastfeeding Support in Oklahoma Facilities

Documentation of Mothers' Feeding Decisions Staff at all (**100%**) facilities in Oklahoma consistently ask about and record mothers' infant feeding decisions.	Standard documentation of infant feeding decisions is important to adequately support maternal choice.
Provision of Breastfeeding Advice and Counseling Staff at **92%** of facilities in Oklahoma 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 in Oklahoma Facilities

Appropriate Use of Breastfeeding Supplements Only **13%** of facilities in Oklahoma 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 **7%** of facilities in Oklahoma 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.
Provision of Hospital Discharge Planning Support Only **6%** of facilities in Oklahoma provide hospital discharge care including a phone call to the patient's home, opportunity for follow-up visit, and referral to community breastfeeding support.	The American Academy of Pediatrics (AAP) clinical practice guidelines recommend examination of the newborn by a qualified health care professional within 48 hours of hospital discharge in order to assess breastfeeding. Ensuring post discharge ambulatory support improves breastfeeding outcomes.
Protection of Patients from Formula Marketing Only **8%** of facilities in Oklahoma adhere to clinical and public health recommendations against distributing formula company discharge packs.	Distribution of discharge packs contributes to premature breastfeeding discontinuation. The ACOG, AAP, American Public Health Association (APHA), and the federal Government Accountability Office (GAO) all identify this practice as inappropriate in medical environments and recommend against it. Distribution of these promotional items exploits patients' trust in their medical providers and care.

Breastfeeding is a National Priority

Breastfeeding protects mothers' and infants' health.[1] *Healthy People 2010*[4] includes breastfeeding as a national priority and is recommended by a number of health professional organizations.[5]

Establishing evidence-based, breastfeeding-supportive maternity practices as standards of care in US hospitals and birth centers will help meet *Healthy People 2010* breastfeeding objectives and will help improve maternal and child health nationwide.

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The CDC mPINC Survey

The CDC mPINC survey was mailed to all US maternity facilities, with the request that it be completed by the person most knowledgeable about the facility's maternity practices related to infant feeding and care.

83% of the 59 eligible hospitals and birth centers in Oklahoma responded to the 2007 CDC mPINC survey.

Each participating facility received its facility-specific benchmark report in October 2008.

For more information about the mPINC survey, visit **www.cdc.gov/mpinc**

Evidence-based maternity care supports mothers' decisions and increases the chances that mothers will meet their personal breastfeeding goals.

Results of the 2007 CDC mPINC Survey: Oklahoma

Oklahoma Composite Quality Practice Score*: 57

Oklahoma State Rank†: 40

mPINC Dimension of Care	Ideal Response to mPINC Survey Question	Percent of Facilities with Ideal Response	OK Rank†	OK Subscale Score* (out of 100)
Labor and Delivery Care	Initial skin-to-skin contact is ≥30 min w/in 1 hour (vaginal births)	33	36	57
	Initial skin-to-skin contact is ≥30 min w/in 2 hours (cesarean births)	35	19	
	Initial breastfeeding opportunity is w/in 1 hour (vaginal births)	27	45	
	Initial breastfeeding opportunity is w/in 2 hours (cesarean births)	26	37	
	Routine procedures are performed skin-to-skin	8	40	
Feeding of Breastfed Infants	Initial feeding is breast milk (vaginal births)	63	36	71
	Initial feeding is breast milk (cesarean births)	56	31	
	Supplemental feedings to breastfeeding infants are rare	13	37	
	Water and glucose water are not used	57	41	
Breastfeeding Assistance	Infant feeding decision is documented in the patient chart	-	-	74
	Staff provide breastfeeding advice & instructions to patients	-	-	
	Staff teach breastfeeding cues to patients	69	44	
	Staff teach patients not to limit suckling time	15	48	
	Staff directly observe & assess breastfeeding	77	40	
	Staff use a standard feeding assessment tool	41	44	
	Staff rarely provide pacifiers to breastfeeding infants	30	19	
Contact Between Mother and Infant	Mother-infant pairs are not separated for postpartum transition	41	34	70
	Mother-infant pairs room-in at night	64	31	
	Mother-infant pairs are not separated during the hospital stay	16	32	
	Infant procedures, assessment, and care are in the patient room	0	36	
	Non-rooming-in infants are brought to mothers at night for feeding	78	23	
Facility Discharge Care	Staff provide appropriate discharge planning (referrals & other multi-modal support)	6	49	21
	Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients	8	49	
Staff Training	New staff receive appropriate breastfeeding education	4	32	47
	Current staff receive appropriate breastfeeding education	24	30	
	Staff received breastfeeding education in the past year	24	45	
	Assessment of staff competency in breastfeeding management & support is at least annual	55	12	
Structural & Organizational Aspects of Care Delivery	Breastfeeding policy includes all 10 model policy elements	7	37	58
	Breastfeeding policy is effectively communicated	81	25	
	Facility documents infant feeding rates in patient population	28	51	
	Facility provides breastfeeding support to employees	51	41	
	Facility does not receive infant formula free of charge	2	42	
	Breastfeeding is included in prenatal patient education	-	-	
	Facility has a designated staff member responsible for coordination of lactation care	65	31	

* CDC created quality practice scores for each participating facility and each state based on facilities' responses to mPINC survey items. Facility practices in 7 dimensions of care ("subscales") contributed to the overall "Composite Quality Practice Score." Possible item, subscale, and overall scores ranged from 0 to 100, with 100 being the highest, best possible score.

† State ranks ranged from 1 to 52, with 1 being the highest rank. In case of a tie, both states were given the same rank.

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

Improvement is Needed in Maternity Care Practices and Policies in Oklahoma

Many opportunities exist in Oklahoma to protect, promote, and support breastfeeding mothers and infants. To take action on this critical need, consider the following:

☑ Examine Oklahoma regulations for maternity facilities and evaluate their evidence base; revise if necessary.

☑ Sponsor an Oklahoma-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 Oklahoma to participate in 18-hour training courses in breastfeeding.

☑ Establish links among maternity facilities and community breastfeeding support networks in Oklahoma.

☑ 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 Quality Improvement efforts including:

- Consistent delivery of optimal care
- Improving patient flow
- Improving patient experience & loyalty
- Engaging physicians in a shared quality agenda
- Increasing staff efficiency
- Optimizing hospital-to-home transitions

☑ Develop a plan to ensure adherence to the Joint Commission's recently revised (July 2009) Perinatal Care Core Measure Set to include exclusive breastfeeding at discharge in hospital data collection starting with April 1, 2010, discharges.

Questions about the mPINC survey?

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

For more information:
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April, 2010

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] DiGirolamo AM, Grummer-Strawn LM, Fein S. Maternity care practices: implications for breastfeeding. Birth 2001;28:94-100.

[3] 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.

[4] US Dept of Health and Human Services. Healthy People 2010 midcourse review. Washington, DC: US Dept of Health and Human Services; 2005. Available at http://www.healthypeople.gov/data/midcourse.

[5] Organizations including but not limited to: National Quality Forum; American Academy of Pediatrics; American Association of Family Physicians; American College of Obstetricians and Gynecologists; Association of Women's Health, Obstetric, and Neonatal Nurses; American College of Nurse Midwives; Academy of Breastfeeding Medicine; American Public Health Association; World Health Organization.