

CDC National Survey of Maternity Care Practices in Infant Nutrition and Care (mPINC)

The US Department of Health and Human Services (DHHS) has established increasing breastfeeding protection, promotion, and support as national policy. Five *Healthy People 2010* goals are dedicated to improving initiation, duration, and exclusivity of breastfeeding. The DHHS Blueprint for Action on Breastfeeding further specifies this need, highlighting the intrapartum hospital stay as an influential experience relative to breastfeeding. Improving practices and policies in the maternity care setting has been identified as one of the most effective strategies for simultaneously addressing all five of the *Healthy People 2010* breastfeeding goals.

Maternity Care Practices and Breastfeeding

In the United States, nearly all infants are born in a hospital or free-standing birth center, and even though their stay is typically very short, events during this time have lasting effects. Correspondingly, the hospital stay is known to be a critical period for the establishment of breastfeeding.

Many of the experiences of mothers and newborns in the hospital affect breastfeeding. In most cases, however, these experiences reflect routine practices at the facility level, and patients rarely request care different from that offered them by health professionals. Breastfeeding is an extremely time-sensitive relationship. Experiences with breastfeeding in the first hours and days of life significantly influence an infant's later feeding. Because of its inextricable relationship with the birth experience, breastfeeding must be established during the maternity hospital stay, not postponed until the infant goes home.

A Cochrane review¹ found that institutional changes in maternity care practices effectively increases breastfeeding initiation and duration rates. Birth facilities that have achieved designation as part of the World Health Organization/UNICEF *Baby Friendly Hospital Initiative* (BFHI)² typically experience an increase in breastfeeding rates.³ In addition, DiGirolamo et al.⁴ found a relationship between the number of *Baby Friendly* steps (included in the *Ten Steps to Successful Breastfeeding* of BFHI) in place at a birth facility and a mother's breastfeeding success. The authors found that mothers experiencing none of the *Ten Steps to Successful Breastfeeding* required for BFHI designation during their stay were eight times as likely to stop breastfeeding before 6 weeks as those experiencing six steps.

The hospital setting and related policies and practices have been identified as key areas to intervene to improve breastfeeding outcomes. Formative research has revealed that although most hospital administrators and staff agree that breastfeeding provides optimal nutrition for most infants, breastfeeding is not yet widely recognized as the significant public health issue that it is, and many are largely unaware of the specific characteristics of a supportive hospital environment. Additionally, despite recognizing the demand for evidence-based health care, many do not accurately identify current non-evidence-based routine hospital practices.

References

- ¹ 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(25):1-171.
- ² World Health Organization/UNICEF. Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services. A joint WHO/UNICEF statement. Geneva: World Health Organization, 1989.
- ³ Philipp BL, Merewood A, Miller LW, et al. Baby Friendly Hospital Initiative improves breastfeeding initiation rates in a U.S. hospital setting. *Pediatrics* 2001;108(3):677-81.
- ⁴ DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of Maternity care practices on breastfeeding. *Pediatrics* 2008;122(Supp 2):543-49.

The CDC mPINC Survey

In October, 2003, CDC convened an expert panel of researchers with specific experience in surveillance and monitoring of hospital practices related to breastfeeding. At the time, no system in the United States collected nationally representative data on these practices. The Expert Panel's recommendation was to establish an ongoing, national system to monitor and evaluate hospital practices related to breastfeeding among all facilities that routinely provide intrapartum care in the United States.

In 2007, CDC administered the first national survey of maternity care practices related to breastfeeding (OMB # 0920-0743), known as the Maternity Practices in Infant Nutrition and Care (mPINC) Survey. The survey was administered to every facility in the US that routinely provides maternity care services. It established a baseline measure of breastfeeding-related maternity care practices at intrapartum care facilities across the United States and Territories and the extent to which practices vary by state. The second survey is proposed for administration in 2009 and biannual thereafter in order to monitor and examine changes in practices over time. Information from the surveys will help inform intrapartum care facilities, state public health departments, and CDC programs.

The mPINC survey was designed as a national census of facilities routinely providing maternity care based on careful review of advantages and limitations of various study designs as well as input from experts in evaluation of hospital maternity care practices and assessment of stakeholders' needs. One individual completed the mPINC survey on behalf of his or her institution in their capacity as the person most knowledgeable about the relevant practices.

The mPINC Survey is a key element of CDC's coordinated activities addressing maternity care practices and policies as they relate to breastfeeding outcomes. This multifaceted and collaborative approach also includes publication of scientific articles on the survey findings, presenting findings at national conferences, prioritizing interventions in the hospital setting as evidence-based strategies to improve breastfeeding in CDC funding opportunities, technical assistance on improving hospital practices, publication of resources highlighting the maternity care setting as an intervention area, and funding extramural projects to identify and evaluate specific new approaches to improve hospital practices related to breastfeeding.