



**What is the mPINC Survey?** The Maternity Practices in Infant Nutrition and Care (mPINC) Survey is a national survey from the Centers for Disease Control and Prevention (CDC) that assesses infant feeding care processes, policies, and staffing expectations in maternity care settings.

**What is in this report?** This report summarizes results from all Massachusetts facilities that participated in the 2013 mPINC Survey and identifies opportunities to improve mother-baby care at hospitals and birth centers and related health outcomes throughout Massachusetts.

**Who participates in the mPINC survey?** All hospitals with maternity services and all free-standing birth centers in the United States are invited to participate in CDC's mPINC survey every two years.

Massachusetts' mPINC Score:

84

In Massachusetts, 94% of 47 eligible facilities participated in CDC's 2013 mPINC Survey.

### Massachusetts Highlights: Strengths

|  |  |  |
|--|--|--|
|  | <p><b>Provision of Breastfeeding Advice and Counseling</b><br/>Staff at all (100%) facilities in Massachusetts provide breastfeeding advice and instructions to patients who are breastfeeding, or intend to breastfeed.</p> | <p>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.</p> |
|  | <p><b>Availability of Prenatal Breastfeeding Instruction</b><br/>All facilities (100%) in Massachusetts include breastfeeding education as a routine element of their prenatal classes.</p>                                  | <p>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.</p>   |

### Massachusetts Highlights: Opportunities for Improvement

|  |  |   |
|--|--|---|
|  | <p><b>Appropriate Use of Breastfeeding Supplements</b><br/>Only 21% of facilities in Massachusetts adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water.</p>  | <p>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.</p>   |
|  | <p><b>Inclusion of Model Breastfeeding Policy Elements</b><br/>Only 41% of facilities in Massachusetts have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM).</p>       | <p>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.</p> |
|  | <p><b>Provision of Hospital Discharge Planning Support</b><br/>Only 27% of facilities in Massachusetts provide hospital discharge care including a phone call to the patient's home, opportunity for follow-up visit, and referral to community breastfeeding support.</p> | <p>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.</p>   |
|  | <p><b>Use of Combined Mother/Baby Postpartum Care</b><br/>Only 34% of facilities in Massachusetts report that most healthy full-term infants remain with their mothers for at least 23 hours per day throughout the hospital stay.</p>                                     | <p>Mother-infant contact during the hospital stay helps establish breastfeeding and maintain infant weight, temperature, and health. Rooming-in increases breastfeeding learning opportunities without affecting duration and quality of maternal sleep, and reduces supplemental feeds.</p>  |

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

## Changes in maternity care practices improve breastfeeding rates.

There are many opportunities to protect, promote, and support breastfeeding in Massachusetts. Opportunities such as those listed below can help bring ideal maternity care practices to all Massachusetts hospitals.

### Change opportunities:

- Examine Massachusetts regulations for maternity facilities and evaluate their evidence base.
- Sponsor a Massachusetts-wide summit of key decision-making staff at maternity facilities to highlight the importance of evidence-based practices for breastfeeding.
- Encourage and support hospital staff across Massachusetts to be trained in providing care that supports mothers to breastfeed.
- Establish links among maternity facilities and community breastfeeding support networks in Massachusetts.
- Implement evidence-based practices in medical care settings across Massachusetts that support mothers' efforts to breastfeed.
- Integrate maternity care into related hospital-wide Quality Improvement efforts across Massachusetts.
- Promote utilization of the Joint Commission's Perinatal Care Core Measure Set including exclusive breast milk feeding at hospital discharge in Massachusetts hospital data collection systems.

## Massachusetts' 2013 Survey Results

84

Massachusetts' State mPINC Score (out of 100)\*

Massachusetts' State mPINC Rank (out of 53)<sup>†</sup>

6

| mPINC Care Dimension  | Care Dimension Subscore* | Ideal Response to mPINC Survey Question  | Percent of MA Facilities with Ideal Response | Item Rank <sup>†</sup> |
|---|--------------------------|--|--|------------------------|
| Labor and Delivery Care   | 88                       | Initial skin-to-skin contact is at least 30 min w/in 1 hour (vaginal births)                                     | 82   | 14                     |
|   |                          | Initial skin-to-skin contact is at least 30 min w/in 2 hours (cesarean births)                                   | 72   | 9                      |
|   |                          | Initial breastfeeding opportunity is w/in 1 hour (vaginal births)  | 73   | 12                     |
|   |                          | Initial breastfeeding opportunity is w/in 2 hours (cesarean births)  | 81   | 4                      |
|   |                          | Routine procedures are performed skin-to-skin  | 57   | 11                     |
| Feeding of Breastfed Infants  | 90                       | Initial feeding is breast milk (vaginal births)  | 96   | ---                    |
|   |                          | Initial feeding is breast milk (cesarean births)   | 91   | ---                    |
|   |                          | Supplemental feedings to breastfeeding infants are rare  | 21   | 32                     |
| Breast-feeding Assistance   | 93                       | Water and glucose water are not used   | 93   | ---                    |
|   |                          | Infant feeding decision is documented in the patient chart   | 98   | ---                    |
|   |                          | Staff provide breastfeeding advice & instructions to patients  | 100  | ---                    |
|   |                          | Staff teach breastfeeding cues to patients   | 98   | ---                    |
|   |                          | Staff teach patients not to limit suckling time  | 82   | 6                      |
|   |                          | Staff directly observe & assess breastfeeding  | 100  | ---                    |
| Contact Between Mother and Infant   | 79                       | Staff use a standard feeding assessment tool   | 84   | 5                      |
|   |                          | Staff rarely provide pacifiers to breastfeeding infants  | 57   | 13                     |
|   |                          | Mother-infant pairs are not separated for postpartum transition  | 80   | 21                     |
|   |                          | Mother-infant pairs room-in at night   | 86   | 27                     |
|   |                          | Mother-infant pairs are not separated during the hospital stay   | 34   | 29                     |
| Facility Discharge Care   | 75                       | Infant procedures, assessment, and care are in the patient room  | 19   | 11                     |
|   |                          | Non-rooming-in infants are brought to mothers at night for feeding   | 84   | 44                     |
| Staff Training  | 76                       | Staff provide appropriate discharge planning (referrals & other multi-modal support)                             | 27   | 34                     |
|   |                          | Discharge packs containing infant formula samples and marketing products are not given to breastfeeding patients | 100  | ---                    |
|   |                          | New staff receive appropriate breastfeeding education  | 35   | 8                      |
|   |                          | Current staff receive appropriate breastfeeding education  | 33   | 16                     |
| Structural & Organizational Aspects of Care Delivery                                  | 85                       | Staff received breastfeeding education in the past year  | 76   | 9                      |
|   |                          | Assessment of staff competency in breastfeeding management & support is at least annual                          | 75   | 8                      |
|   |                          | Breastfeeding policy includes all 10 model policy elements   | 41   | 8                      |
|   |                          | Breastfeeding policy is effectively communicated   | 93   | ---                    |
|   |                          | Facility documents infant feeding rates in patient population  | 96   | ---                    |
|   |                          | Facility provides breastfeeding support to employees   | 86   | 5                      |
|   |                          | Facility does not receive infant formula free of charge  | 32   | 19                     |
| Breastfeeding is included in prenatal patient education                               | 100                      | ---  |  |                        |
| Facility has a designated staff member responsible for coordination of lactation care | 86                       | 5  |  |                        |

### Questions about the mPINC survey?

Information about the mPINC survey, results, reports, scoring, and history is at: [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc)

### For more information:

Centers for Disease Control and Prevention  
Division of Nutrition, Physical Activity, and Obesity  
Atlanta, GA USA

November 2014

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

† Ranks range from 1 to 53, 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.

### References

- <sup>1</sup> 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.
- <sup>2</sup> 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/topics/objectives/2020/pdfs/MaternalChildHealth.pdf>
- <sup>3</sup> DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of maternity care practices on breastfeeding. *Pediatrics* 2008;122, Supp 2:S43-9.
- <sup>4</sup> 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.