

The Keystone 10

A Breastfeeding Quality Improvement Initiative
for Pennsylvania Birthing Hospitals and Centers



The Keystone 10

Contents

Introduction	3
Breastfeeding: A National Agenda	4
Healthy People 2020	
Call to Action to Support Breastfeeding	
White House Task Force on Obesity	
Breastfeeding in Pennsylvania	5
Overview of the Keystone 10 Initiative	10
Pennsylvania Breastfeeding Awareness and Support Plan	
Changes in Facility Practices Can Improve Breastfeeding Rates	
Goals of the Keystone 10	
Benefits of Participation by Facilities	
What to Expect	
Recognition of Efforts	
Organizational Endorsements	15
References	16

The Keystone 10

Introduction

“By supporting breastfeeding as the normative way to feed an infant, clinicians can have a powerful role in improving health outcomes across two generations.”¹ Babies who receive their own mothers’ milk are healthier and experience fewer hospitalizations and women who breastfeed lower their risk of cancer, cardiovascular diseases, and diabetes compared with women who do not breastfeed. “Breastfeeding should be acknowledged as the biological norm for infant feeding.”¹

Breastfeeding is an individual decision and a public health issue. The Surgeon General’s Call to Action to Support Breastfeeding,² the Centers for Disease Control and Prevention (CDC), the United States Department of Agriculture’s Supplemental Nutrition Program for Women, Infants and Children (WIC), and First Lady Michelle Obama’s Let’s Move Campaign call for the protection, promotion, and support of breastfeeding as critical to the health of the public. The American Academy of Pediatrics recommends “exclusive breastfeeding for about 6 months, followed by continued breastfeeding as complementary foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant.”³

The Keystone 10, a breastfeeding quality improvement initiative, is being launched by the Pennsylvania Breastfeeding Awareness and Support Program of the Pennsylvania Department of Health (Department). This initiative seeks to engage Pennsylvania birthing hospitals and birth centers in local, regional and state level efforts to improve the protection, promotion and support of breastfeeding for all Pennsylvania infants and mothers.

Through participation in The Keystone 10, birthing facilities, along with others from across Pennsylvania, will embark on the adoption and implementation of evidence-based maternity care practices with the goal of improving individual facility and state level breastfeeding care and rates, and ultimately improving the health of mothers and babies. During the process, facilities will share accomplishments, struggles and ideas for improvement. Improvements in care will be made, change will be measured and successes celebrated. Personnel will participate in breastfeeding education and learning activities. Mothers, infants, families and communities will benefit from the hard work and dedication of all involved.

The Keystone 10

Breastfeeding: A National Agenda

Healthy People 2020

“Healthy People is a set of goals and objectives with 10-year targets designed to guide national health promotion and disease prevention efforts to improve the health of all people in the United States.”⁴ Healthy People targets have led the nation in planning for a healthier society for over three decades. The current version, Healthy People 2020, sets the following breastfeeding objectives for the nation to achieve, and these objectives guide the Keystone 10.

Healthy People 2020 Breastfeeding Related Objectives	Target
Increase the proportion of infants who are breastfed	
1: Ever	81.9%
2: At 6 months	60.6%
3: At 1 year	34.1%
4: Exclusively through 3 months	46.2%
5: Exclusively through 6 months	25.5%
Reduce the proportion of breastfed newborns who receive formula supplementation within the first two days of life	14.2%
Increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies	8.1%

The Call to Action to Support Breastfeeding

On Jan. 20, 2011, Regina Benjamin, MD, then Surgeon General of the United States, issued The Surgeon General’s Call to Action to Support Breastfeeding. “With this ‘Call to Action,’ I am urging everyone to help make breastfeeding easier,” Doctor Benjamin said in her announcement. “Many barriers exist for mothers who want to breastfeed,” she continued. “They shouldn’t have to go it alone. Whether you’re a clinician, a family member, a friend, or an employer, you can play an important part in helping mothers who want to breastfeed.”² The following are important roles that health care professionals can play in improving breastfeeding rates and increasing support for breastfeeding:

- Health care systems should ensure that maternity care practices provide education and counseling on breastfeeding. Facilities should follow the 10 steps to supporting breastfeeding.
- Clinicians should ensure that they are trained to properly care for breastfeeding mothers and babies. They should promote breastfeeding to their pregnant patients and make sure that mothers receive the best advice on how to breastfeed.
- Families should give mothers the support and encouragement they need to breastfeed. Family members can help mothers prepare for breastfeeding and support their continued breastfeeding, including after their return to work or school.

The Keystone 10

White House Task Force on Childhood Obesity

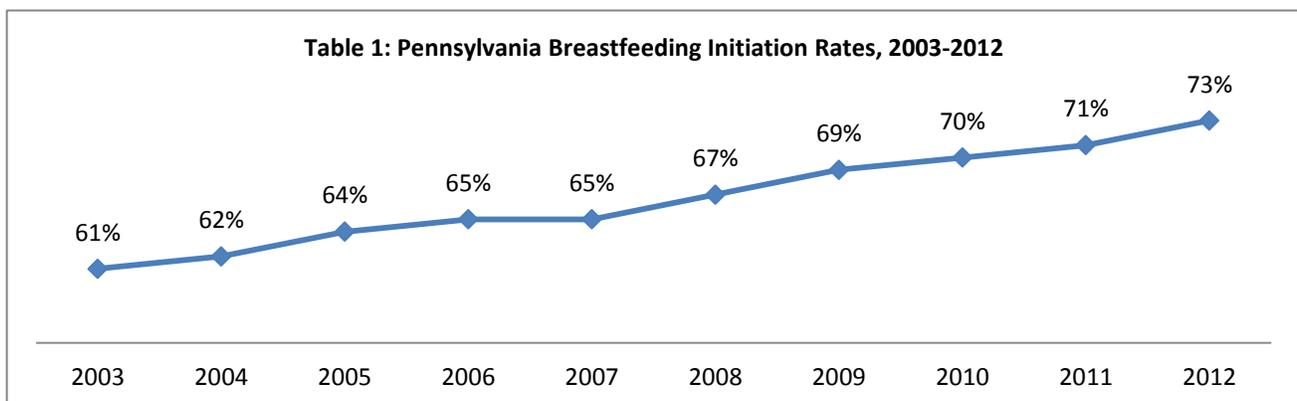
The first ever White House Task Force on Childhood Obesity was established to develop and implement an inter-agency plan to end the problem of childhood obesity within a generation. The goal of the plan is to reduce the childhood obesity rate to just five percent by 2030 – which was the rate in the late 1970s before childhood obesity first began to rise. Among the 70 specific recommendations in the plan, the following relate specifically to breastfeeding and health care:⁵

- **Recommendation 1.3:** Hospitals and health care providers should use maternity care practices that empower new mothers to breastfeed, such as the Baby-Friendly hospital standards.
- **Recommendation 1.4:** Health care providers and insurance companies should provide information to pregnant women and new mothers on breastfeeding, including the availability of educational classes, and connect pregnant women and new mothers to breastfeeding support programs to help them make an informed infant feeding decision.
- **Recommendation 1.5:** Local health departments and community-based organizations, working with health care providers, insurance companies, and others should develop peer support programs that empower pregnant women and mothers to get the help and support they need from other mothers who have breastfed.

Breastfeeding in Pennsylvania

Pennsylvania Certificates of Live Birth

In Pennsylvania, breastfeeding initiation is identified on each Certificate of Live Birth (birth certificate) and has been collected annually by the Department since 2003 for both in-facility and out-of-facility Pennsylvania resident births. The Department utilizes data gathered from birth certificates as the primary source of breastfeeding initiation rates and utilizing such data to measure success of the efforts designed to increase those rates. Overall, breastfeeding initiation rates in Pennsylvania have continued to improve since the initial collection year as noted in Table 1 below.



Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research, Certificate of Live Birth. These data were provided by the Bureau of Health Statistics & Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

The Keystone 10

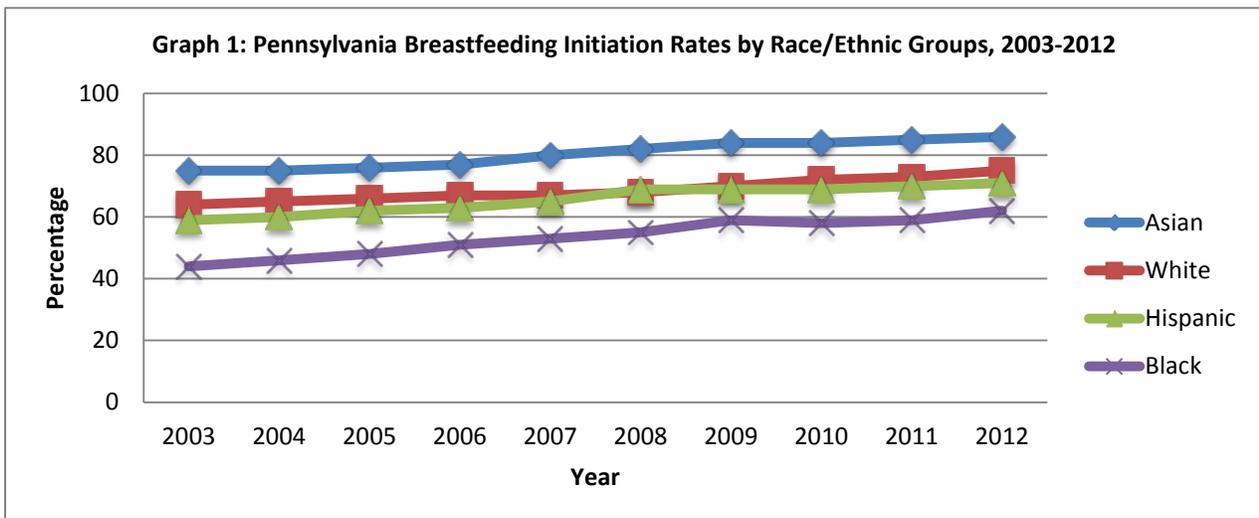
The age of the mother is a factor in breastfeeding initiation. As seen in Table 2, women 25 and older were more likely to initiate breastfeeding than those under the age of 25.

Table 2: Pennsylvania Breastfeeding Initiation Rate by Age of Mother, 2006-2012

Mother's Age	Percent Breastfeeding Initiation by Year						
	2006	2007	2008	2009	2010	2011	2012
Under 15	36%	38%	36%	43%	37%	46%	43%
15-19	48%	48%	50%	54%	54%	55%	58%
20-24	56%	57%	59%	60%	62%	63%	65%
25-29	67%	68%	69%	71%	73%	73%	75%
30-34	71%	72%	73%	76%	77%	78%	79%
35-39	72%	73%	73%	75%	76%	77%	78%
40-44	74%	73%	74%	75%	75%	76%	75%
45 and Over	77%	75%	75%	74%	70%	69%	62%

Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research, Certificate of Live Birth. These data were provided by the Bureau of Health Statistics & Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

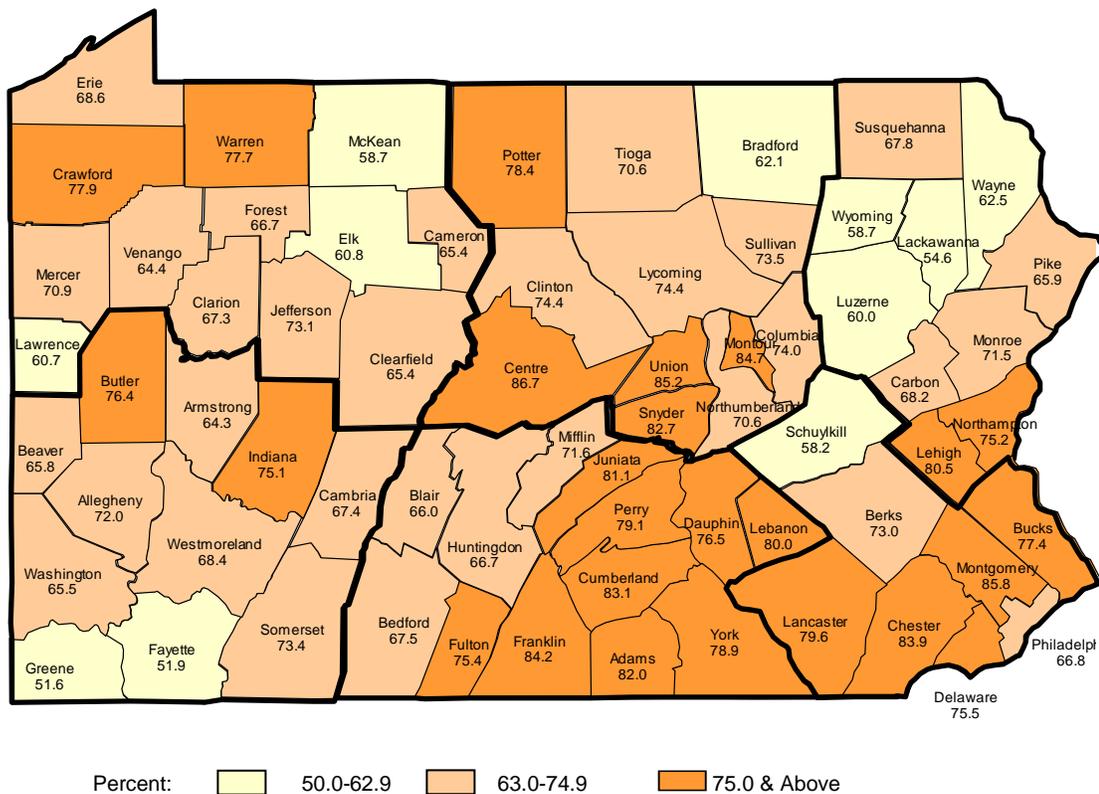
Graph 1 illustrates the racial and ethnic disparities in breastfeeding initiation rates in Pennsylvania, and Figure 1 depicts breastfeeding initiation rates for individual counties. Asian women consistently initiate breastfeeding at rates higher than other races/ethnic groups, and African-American women consistently experience the lowest breastfeeding initiation rates. It is worthy to note, however, that all groups experienced a rise in their rates from 2003 to 2012.



Source: Pennsylvania Department of Health, Bureau of Health Statistics and Research, Certificate of Live Birth. These data were provided by the Bureau of Health Statistics & Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

The Keystone 10

Figure 1: Percent of Live Births to Mothers Who Breastfed by County, Pennsylvania Resident Occurrences, 2012



Percent: 50.0-62.9 63.0-74.9 75.0 & Above

Note: Unknowns excluded in calculation for percent breastfed.

Source: Certificates of Live Birth. Pennsylvania Department of Health, Bureau of Health Statistics and Research. These data were provided by the Bureau of Health Statistics & Research, Pennsylvania Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions.

CDC Breastfeeding Report Card

The CDC Breastfeeding Report Card has been published annually since 2007 and provides state and national statistics on breastfeeding rates for initiation (infants started to breastfeed) and duration (at six months and 12 months) as well as exclusive breastfeeding rates at three and six months.

In the 2014 Report Card, Pennsylvania’s breastfeeding initiation rate was 72.9 percent an increase from 70.2 percent in the 2013 Report Card but lower than the national rate of 79.2 percent. By six months after birth, only 45.7 percent of mothers were still breastfeeding in Pennsylvania, and by twelve months, the percent falls to 26.1 (49.4 and 26.7 percent, respectively, on a national level). Only 34 percent of Pennsylvania mothers were exclusively breastfeeding at three months and 15.3 percent exclusively breastfeeding at six months (40.7 and 18.8 percent respectively on a national level)⁶.

CDC Breastfeeding Report Cards can be found at: www.cdc.gov/breastfeeding/data/reportcard.htm.

The Keystone 10

Maternity Practices in Infant Nutrition and Care

Conducted biannually since 2007, the CDC Maternity Practices in Infant Nutrition and Care survey⁷, or mPINC, is a voluntary, self-reported survey of facilities with registered maternity beds in the United States and its Territories. Survey scores provide an indication of how well maternity care practices and policies of participating facilities support breastfeeding. The higher the score (on a scale of 0-100), the stronger the practices and policies. All facilities that voluntarily choose to participate are provided with an individual report, and each state receives an aggregate score sheet of all the participating facilities in the state.

Pennsylvania's average total mPINC score for 2013 was 74, which ranks 32nd out of 53 (all states, DC, Puerto Rico and Island Territories). This is an increase from 2011, when the score was just 66 and is just slightly lower than the 2013 national average of 75. The 2013 score resulted from 88 percent of Pennsylvania's maternity hospitals and birthing centers responding to the survey.

The table below summarizes Pennsylvania's subscores for 2013 compared to scores from 2011. All scores indicate that Pennsylvania facilities continue to strengthen their policies and practice that support breastfeeding. The following key clinical care processes, policies and staffing expectations are appropriate for care of all perinatal patients, unless medically contraindicated:

Pennsylvania mPINC Survey Subscore Measures	2011	2013
I. Labor and delivery care — Upon delivery, the newborn is placed skin-to-skin with the mother, allowing uninterrupted time for breastfeeding.	64	76
II. Postpartum care:		
a. Feeding of breastfed infants — The breastfeeding infant is only offered pacifiers and supplements (infant formula, water and glucose water) when medically indicated;	82	87
b. Breastfeeding assistance — Assistance is offered to the breastfeeding mother and infant using consistent standards for supportive patient education and assessment;	84	89
c. Contact between mother and infant — The infant is enabled to stay with the mother 24 hours per day, without unnecessary separation or restrictions.	65	70
III. Facility discharge care — The breastfeeding mother and infant are assured ambulatory breastfeeding care; patient discharge gifts contain no infant formula marketing samples.	42	61
IV. Staff training — All staff with primary responsibility for care of the breastfeeding mother and infant receive appropriate breastfeeding skills training and assessment.	52	64
V. Structural and organizational aspects of care delivery — Best practices policies are implemented for staffing, care process, and communication expectations in perinatal patient education and care settings; are supportive of breastfeeding employees; and are free from financial conflict of interest.	72	73

The Keystone 10

The state's mPINC report also indicates the strengths of its facilities, as well as areas that need improvement. In the 2013 Report,

Strengths in Pennsylvania were:

Documentation of Mothers' Feeding Decisions	Staff at all (100%) of facilities consistently ask about and record mothers' infant feeding decisions
Provision of Breastfeeding Advice and Counseling	Staff in 98% of facilities provide breastfeeding advice and instructions to patients who are breastfeeding, or intend to breastfeed

Those areas in need of improvement are:

Appropriate Use of Breastfeeding Supplements	Only 29% of facilities adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water
Inclusion of Model Breastfeeding Policy Elements	Only 24% of facilities have comprehensive breastfeeding policies including all model breastfeeding policy components recommended by the Academy of Breastfeeding Medicine (ABM)
Initiation of Mother and Infant Skin-to-Skin Care	Only 58% of facilities initiate skin-to-skin care for at least 30 minutes upon delivery of the newborn
Use of Combined Mother/Baby Postpartum Care	Only 26% of facilities report that most healthy full-term infants remain with their mothers for at least 23 hours per day throughout the hospital stay

mPINC surveys can be found at www.cdc.gov/mpinc.

The Keystone 10

Overview of the Keystone 10 Initiative

The Department is very excited to be launching The Keystone 10 breastfeeding quality improvement initiative in 2014. This no cost, voluntary initiative has been developed to align closely with the evidence based Ten Steps to Successful Breastfeeding that serve as core components of the World Health Organization's Baby Friendly Hospital Initiative (BFHI). The BFHI is the benchmark across the world for improving breastfeeding awareness, education and support within health care settings. Similar initiatives in other states have also been reviewed and many successful elements from those programs have been incorporated within the Keystone 10.

This initiative is being conducted in collaboration with the Hospital & Healthsystem Association of Pennsylvania (HAP) and is endorsed by a variety of breastfeeding and health care-related organizations (see page 15 for listing). The PA Chapter of the American Academy of Pediatrics is the Department's primary partner in Keystone 10, serving as the managing entity for the initiative.

The Pennsylvania Breastfeeding Awareness and Support Program

The Department developed the Pennsylvania Breastfeeding Awareness and Support Program in 2004 with the overall mission of increasing the number of mothers who choose breastfeeding as their long-term infant feeding method. This mission is accomplished through the development of collaborative partnerships and local coalitions, via health care provider education and initiatives, and the provision of educational materials and presentations.

The Pennsylvania Breastfeeding Awareness and Support Plan was published in 2013 and outlines strategies targeting the improvement of breastfeeding rates in the state. Specifically, Strategy 4 discusses ways to improve health care support of breastfeeding, with the understanding that the hospital and birthing center environment strongly influences how a mother cares for and feeds her child. The Plan's Recommendations for Action in Strategy 4 include:

- Improve health care provider support for breastfeeding:
 - Ensure up-dated information on lactation support services is available
 - Collaborate with medical organizations and lactation advocacy groups to provide continuing education materials for health providers in lactation management, counseling and problem identification

- Encourage facilities to update their policies, practices and procedures to follow evidence-based support for breastfeeding.
 - Develop a statewide model facility breastfeeding support policy that facilitates best practices; recognize facilities, health providers and clinics that follow this model
 - Understand the true cost and savings of various infant feeding methods in the facility setting

The Keystone 10

- Develop facility collaboratives across the state:
 - Encourage facilities to share policies, procedures and protocols with each other
 - Design a facility recognition program to encourage adoption of the Ten Steps to Successful Breastfeeding to support breastfeeding and recognize each step accomplished

Changes in Facility Practices can Improve Breastfeeding Rates

The World Health Organization has identified 10 researched-based facility practices that when implemented, “impact breastfeeding exclusivity and duration and are key to improving health outcomes for mothers and babies.”⁸ Research suggests an increase in the number of the 10 steps implemented in facilities results in an increase in breastfeeding rates.⁹

“Mothers in the United States were 13 times more likely to stop breastfeeding before six weeks if they delivered in a hospital where none of the ‘10 Steps for Successful Breastfeeding’ were followed as compared to mothers who delivered at hospitals where at least six of the ten steps were followed.”¹⁰ “Furthermore, following the steps decreased the disparities in initiation and duration rates of breastfeeding seen across different income, ethnic and racial groups.”¹¹ Mothers encouraged to breastfeed by physicians or nurses are four times more likely to initiate breastfeeding than mothers who do not receive encouragement.¹²

The 10 Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant mothers about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast milk unless medically indicated.
7. Practice “rooming-in.” Allow mothers and infants to remain together 24 hours a day.
8. Encourage unrestricted breastfeeding.
9. Give no pacifiers or artificial nipples to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them upon discharge from the facility or clinic.

The Keystone 10

Goals of the Keystone 10 Initiative

The Keystone 10 initiative seeks to engage birthing facilities in Pennsylvania in the adoption and implementation of the ten evidence-based steps noted above. The overall goals for Pennsylvania as a result of this initiative are to:

1. Increase breastfeeding initiation and duration rates in Pennsylvania;
2. Increase exclusive breastfeeding at facility discharge;
3. Support breastfeeding with evidence-based maternity care practices; and
4. Improve the health of mothers and babies.

Benefits of Participation for Facilities

Participation in the Keystone 10 Initiative will be beneficial for facilities as well in a number of ways. As related to breastfeeding, facilities will likely experience:

- Increased patient and family satisfaction;
- Increased staff knowledge;
- Expanded staff satisfaction and staff retention;
- Enhanced image and reputation;
- Potential cost savings.

What to Expect

Expect to be amazed at what Pennsylvania's facilities can accomplish!

Seriously, recognizing that each facility is its own unique entity and that personnel are often responsible for a variety of duties, determining what this initiative looks like within individual facilities and who will be involved will take some planning and decision making. To make the most of the initiative, facilities are strongly encouraged to engage as many maternity care and related staff as possible in these efforts and, as applicable, engage other offices such as human resources, public relations, quality improvement and purchasing in this work.

Facilities will be asked to take an honest look at what they are currently doing within their maternity care settings that both supports and hinders breastfeeding by mothers. What do policies indicate and how are they being implemented? Does the staff need more education and skills to work more effectively with mothers? How are facilities partnering in the support of breastfeeding,

The Keystone 10

not only during the delivery phase, but also before women arrive and after they are discharged?
What do facilities do well, what can be done better?

While there is no time limit for completion of the initiative, facilities should plan to participate for the next two to three years to really ensure that lasting changes are made.

Outlined below are the expectations for participation by your facility:

- Development, engagement or revitalization of a multidisciplinary breastfeeding committee to assist in all initiative efforts. Membership may include, but is not limited to physicians, nurse managers, staff nurses, representatives from all shifts, quality assurance, nurse educator, prenatal education department, community resource department, families and community entities;
- Development or revision of breastfeeding policies, procedures and protocols to include the adoption and implementation of evidence-based practices;
- Evaluation of current breastfeeding practices and associated processes of care to develop well-defined, measureable goals and the plan to achieve those goals;
- Attendance at multi-facility initiative-related learning collaboratives. These collaboratives are an opportunity to learn with and from other facilities involved in the initiative through discussions about improvement strategies, tools, and resources;
- Completion of questionnaires, inventories and data (baseline and ongoing). Data collected for this project may include information about individual patients, practitioners, or staff. All shared data will exclude protected health information as defined by Health Insurance Portability and Accountability Act (HIPAA);
- Supporting selected staff in obtaining breastfeeding education as well as developing a plan for incorporating breastfeeding education into operational practice; and
- Working with the Department including receiving technical assistance and participating in educational opportunities.

The Keystone 10

Recognition of Efforts

As the birthing facility completes each step, staff will submit the appropriate paper work for approval and the Department will recognize their accomplishments on the Department's website. Upon completion of all 10 steps, the facility will receive full recognition on the Department's website, as well as the ability to use the Keystone 10 designated achievement in marketing and advertising efforts.

The Keystone 10 also recognizes that there are hospitals in the state working towards or designated as Baby-Friendly® by Baby-Friendly® USA. If a facility is on the pathway to designation as Baby-Friendly, please know that they are welcome to join in The Keystone 10 and share their successes and challenges with other hospitals that are also seeking to improve their quality of care. If a facility has done its hard work and is already designated Baby-Friendly® by Baby-Friendly® USA, let us know, as we would like to also recognize you as part of The Keystone 10.

The Keystone 10

Organizational Endorsements

The following organizations have endorsed the efforts to support the adoption of evidence based breastfeeding practices within Pennsylvania birthing facilities:

Hospital and Healthsystem Association of Pennsylvania
Pennsylvania Breastfeeding Coalition
Pennsylvania Medical Society
Maternity Care Coalition
March of Dimes Foundation, Pennsylvania Chapter
Pennsylvania Academy of Family Physicians
Pennsylvania Osteopathic Medical Association
Nurture: South Central Pennsylvania Lactation Consultant Association
Pennsylvania Midstate Lactation Coalition
Metro Family Practice, Inc.
American Academy of Pediatrics, Pennsylvania Chapter
Pennsylvania Coalition of Nurse Practitioners

The Keystone 10

References

1. Stuebe AM, Schwarz EB. (2010). The risks and benefits of infant feeding practices for women and their children. *Journal of Perinatology* 30:155-162.
2. U.S. Department of Health and Human Services. (2011). *The Surgeon General's Call to Action to Support Breastfeeding*. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General. Available at <http://www.surgeongeneral.gov/library/calls/breastfeeding/calltoactiontosupportbreastfeeding.pdf>.
3. American Academy of Pediatrics. (2012). Breastfeeding and the use of human milk. *Pediatrics*, 129(3):e827-e841.
4. U.S. Department 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>.
5. White House Task Force on Childhood Obesity. (2010). Solving the problem of childhood obesity within a generation. Available at http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf.
6. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Breastfeeding Report Card, United States/2014. Available at <http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf>.
7. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. CDC Survey of Maternity Practices in Infant Nutrition and Care. 2013. To be available at <http://www.cdc.gov/breastfeeding/data/mpinc/survey.htm>.
8. Vermont Department of Health 10 Steps to empower mothers and nurture babies. (2011). www.healthvermont.gov/wic/food-feeding/breastfeeding/10steps Retrieved July 2, 2013.
9. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2011) Vital Signs: Facility practices to support breastfeeding—United States, 2007 and 2009. *Morbidity and Mortality Weekly Report* 60(30):1020-1025.
10. DiGirolamo AM, Grummer-Strawn LM, Fein SB. (2008) Effect of maternity-care practices on breastfeeding. *Pediatrics* 122 (Supplement 2):S43-S49.
11. Merewood A, Mehta SD, Chamberlain LB, et al. (2005). Breastfeeding rates in US Baby-Friendly hospitals: results of a national survey. *Pediatrics* 116(3):628-634.
12. Lawrence, R. A., Lawrence, R. M. (2011). *Breastfeeding: A Guide for the Medical Profession* (7th ed.). Maryland Heights, Missouri: Elsevier/Mosby.