



Objectives

In an effort to maximize breastfeeding initiation and duration, at the end of this training participants will be able to:

- Apply the basic principles of breastfeeding to provide anticipatory guidance, support, and resources to facilitate breastfeeding exclusively for the first six months, and thereafter with the introduction of other foods for up to one year and as long as mutually desired by the mother and baby.
- Manage common breastfeeding problems and challenges (i.e., milk supply, breast soreness, returning to work), bearing in mind the impact of health care professionals' attitudes and recommendations on a families' decision to initiate and continue breastfeeding.
- Describe the adverse effects of secondhand smoke on children, provide counseling to families to reduce tobacco exposure and quit smoking, and use community resources and the PA Quitline.
- Identify appropriate communication skills or strategies to support and promote breastfeeding among mothers who smoke and provide assistance to quit smoking.
- Develop a plan for practice improvement (i.e., related to office policy and practices) that optimizes outcomes for families related to breastfeeding and tobacco cessation and promote continuing education among staff.
- Use the new Women, Infants and Children (WIC) Food Packages as a resource for breastfeeding promotion and support.

Creating an Office Setting that Promotes and Supports Breastfeeding

Esther K. Chung, MD, MPH, FAAP

All health care providers, whether providing general or specialty care, play a very important role in a family's decision to initiate and continue breastfeeding. Breastfeeding rates in the United States, though on the rise, are not as high as they should be. We live in a culture where breastfeeding is thought of as a health behavior that is "good for babies," but one that is not always chosen by families. Our duties as health care professionals are to actively encourage families to breastfeed and to reduce the social

Our duties as health care professionals are to actively encourage families to breastfeed and to reduce the social disparities related to breastfeeding.

disparities related to breastfeeding. The health benefits of breastfeeding to women, including reduced risks for breast and ovarian cancers, and children including reduced risks for acute otitis media, gastroenteritis, asthma, and obesity are irrefutable. The environmental and economic benefits to society have been demonstrated but are too often underestimated. Health professionals use an active approach to a number of health behaviors, including tobacco cessation and alcohol prevention. Likewise, health professionals should enthusiastically promote and support breastfeeding.

In the early 19th century, breastfeeding was the norm in the United States. With the introduction of cow's milk, scientific advances in formula manufacturing and widespread formula marketing, formula feeding has replaced breastfeeding as the cultural norm. Though breastfeeding is currently not the norm in the United States, it is the norm in other developed countries, including Norway and Australia, where breastfeeding initiation rates are nearly 100 percent. Similarly, in many developing countries, which are the countries of origin for many of our patients, breastfeeding is the norm. Health care professionals should lead the way by making breastfeeding the cultural norm in their office settings.

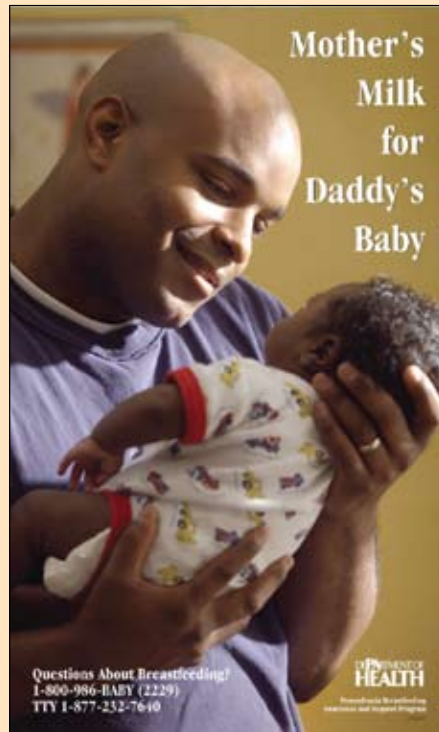
This article provides practical information on how to create an office setting that promotes and supports breastfeeding, independent of the specialty in which you practice. Health care offices should set the example for other businesses by making their office environments a place where breastfeeding is accepted and encouraged. It is extremely important to be supportive of breastfeeding in verbal and nonverbal communication that is used with families. The American Academy of Pediatrics calls for the office setting to provide an inviting, encouraging, informative, flexible, and supportive environment for breastfeeding families. These

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Table 1:
General Tips for Making Your Office Breastfeeding-Friendly

1. Encourage exclusive breastfeeding for the first six months of the baby's life.
2. Welcome breastfeeding in all patient areas of the office.
3. Display images of breastfeeding mothers and their infants and post signs allowing mothers to breastfeed their children in all patient areas.
4. For mothers uncomfortable with breastfeeding in public, provide a private space for them to breastfeed.
5. Avoid marketing and promoting infant formula, do not distribute free formula, or display advertisements for formula via pens, posters, calendars, etc.
6. Always provide culturally competent care.
7. Be familiar with local hospital policies and community resources, including a phone resource and refer families when necessary.
8. Track breastfeeding initiation and duration rates in your practice.
9. Be familiar with current professional policy statements.
10. Develop and maintain a written breastfeeding office policy.
11. Provide patient education materials.
12. Train all staff about the health benefits and challenges to breastfeeding.
13. Identify a breastfeeding champion who serves as a resource person and an advocate in the community to work with local resources and to work toward legislative change to improve supports for women who breastfeed.
14. Be a model employer by providing breastfeeding employees with space, time, education, and privacy to pump and store breastmilk.

Figure 1:



Copy of a breastfeeding poster from the Pennsylvania Department of Health.

See <http://www.dsf.health.state.pa.us/health/cwp/view.asp?A=179&Q=247761>.

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recommendations apply to all settings serving families and are not limited to obstetric and pediatric offices. Breastfeeding, after all, is a public health issue that impacts everyone.

Many health care professionals argue that, by definition, doctors' offices support breastfeeding. Philosophically many practices may support the notion of breastfeeding but that does not necessarily mean that they welcome breastfeeding. For example, in many office waiting rooms, advertisements for infant formula can be found. According to a recent report from the Government Accounting Office, a major way that the formula industry markets their product is through the medical community, including physician offices. If a woman sitting in your waiting room picks up a magazine and sees a plump baby in a formula advertisement, then in her mind she may retain positive images of

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Table 2a:
Specific Tips for Practices Providing Pediatric Care

1. Discourage the use of pacifiers until breastfeeding is well established.
2. Avoid supplementation with infant formula unless medically indicated.
3. Minimize separation of the baby from the mother, particularly in the first several days of life.
4. Reserve appointments for newborns needing follow-up within 48 to 72 hours following hospital discharge.
5. Encourage breastfeeding on demand.
6. Encourage families to choose a supportive caregiver or child care center.
7. Allow infants to feed on demand and avoid scheduled feedings when possible.
8. Consider hiring a lactation specialist, who has been certified by the International Board of Lactation Consultant Examiners (IBCLCE).
9. Have a telephone support line for questions related to breastfeeding.

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babies fed formula. Similarly, if the nurse triaging her is using a pen with the name of a formula vendor on it, the woman is going to believe that the nurse and practice support formula. On the other hand, if there are images of breastfeeding mothers in the waiting area, and there are no advertisements for formula, then the mother is going to take interest in breastfeeding and will likely feel supported if she decides to breastfeed.

We cannot assume that families know that we are supportive of breastfeeding unless we tell them. It may be that many staff members are educated about the benefits and challenges to breastfeeding, while others are not. Alternatively, it may be that some staff members do not support all aspects of breastfeeding. For example, if a registration clerk, who is uncomfortable with breastfeeding in public, gives a breastfeeding mother a disapproving look, the mother may feel unsupported and even

ashamed. In the future, the mother may not feel that she is able to breastfeed in the office and she may eventually switch to infant formula, which is easily accessible and generally accepted by all. Similarly, if a mother needs to breastfeed her child and the office staff tell her that there is no suitable place where she can do this, then she may interpret that to mean breastfeeding is not supported by the office. On the other hand, if the registration clerk smiles and makes a positive comment about breastfeeding, then

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Figure 2:



Copy of the “Breastfeeding Welcome Here” decal, available from Maternity Care Coalition.

<http://www.momobile.org/breastfeeding/DecalCampaign.html>.
Used with permission.

Table 2b: Specific Tips for Practices Providing Women’s Health Care

1. Inform all pregnant women about the importance of breastfeeding, but do not limit breastfeeding education to pregnant or breastfeeding women.
2. Encourage expectant families to attend prenatal breastfeeding classes when available.
3. Educate families about the importance of skin-to-skin contact immediately following delivery and within the first hour of birth.
4. Promote rooming-in, where the infant remains in the mother’s room for the postpartum stay, with families
5. Provide accurate information about peripartum medications and interventions on breastfeeding initiation and duration.
6. Avoid instrumentation and cesarean section deliveries when possible.
7. Minimize separation of the mother from the baby, particularly in the first several days postpartum.
8. Consider hiring a lactation specialist, who has been certified by the (IBCLCE).
9. Have a telephone support line for questions related to breastfeeding.

Table 3: Resources for Office Brochures, Posters and Decals

Brochures

An Easy Guide to Breastfeeding from the Office on Women’s Health of the Department of Health and Human Services. Available in English targeting the general population, African American women, and American Indian and Alaska Native women. Also available in Chinese and Spanish. <http://www.4woman.gov/Pub/BF.General.pdf> Download for free, or call 1-800-994-9662 to order up to 25 free copies.

Breastfeeding Your Baby from the Academy of Obstetricians and Gynecologists. http://www.acog.org/bookstore/Breastfeeding_Your_Baby_P119.cfm. Packs of 50 available for \$23.10.

Breastfeeding Your Baby: Answers to Common Questions from the American Academy of Pediatrics. https://www.nfaap.org/netforum/eweb/dynamicpage.aspx?site=nf.aap.org&webcode=aapbks_productdetail&key=19a755d0-2fa7-495e-80a7-c43b3a1c674e. Packs of 50 available to members for \$30.

Posters

Breastfeeding: Baby’s First Immunization poster available from the American Academy of Pediatrics. <http://www.aap.org/breastfeeding/PDF/BFIZPoster.pdf>. Download for FREE.

Breastfeeding impact posters from the Pennsylvania Department of Health, featuring men and women of various ethnic backgrounds. <http://www.ds.health.state.pa.us/health/cwp/view.asp?A=179&Q=247761>. (Accessed February 6, 2009). Order for FREE.

Breastfeeding Your Baby poster. From the Academy of Obstetricians and Gynecologists. http://www.acog.org/bookstore/Breastfeeding_Your_Baby_Poster_P462.cfm. Order for \$9 each.

Decals

Breastfeeding Welcome Here decals. <http://www.aap.org/breastfeeding/PDF/BFIZPoster.pdf>. \$1.50 each.

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the mother may feel welcomed to continue breastfeeding and feel extra confident in her decision to do so.

The more welcomed patients feel in your office, the more likely they are to return, and the more comfortable they will feel in seeking your professional help. The tips in Table 2a (see page 2) are a compilation of guidelines.

Figure 1 (see page 2) is a copy of a breastfeeding poster that health professionals can order online, free of charge, from the Pennsylvania Department of Health. These multi-ethnic, laminated posters can be placed in waiting rooms and patient rooms to show your patients that you promote and support breastfeeding. Figure 2 (see page 3) is a copy of the “Breastfeeding Welcome Here” decal, available from Maternity Care Coalition. This removable, self-

adhesive decals can be placed on surfaces to face in or out.

For your convenience, we have also provided you with a list of resources (see table 3) where you can access affordable and free materials to make your office more breastfeeding-friendly.

References are available at www.pamedsoc.org/counterdetails or by calling (800) 228-7823, ext 7806.

FACTULTY

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Debra L. Bogen, MD, is Assistant Professor of Pediatrics, University of Pittsburgh School of Medicine. Dr. Bogen is a Board Certified Pediatrician. She is a member of the American Academy of Pediatrics (AAP), PA Chapter, AAP, Academy of Breastfeeding Medicine, and PA Breastfeeding Coalition to name a few.

Esther K. Chung, MD, MPH, is on the Medical Staff, Department of Pediatrics, A.I. DuPont Hospital for Children and Thomas Jefferson University Hospital. Dr. Chung is a Board Certified Pediatrician. She is a member of the AAP, PA Chapter, AAP, Philadelphia Pediatric Society, and Pennsylvania Public Health Association. She serves on many professional and scientific committees.

Judith L. Gutowski, BA, IBCLC, RLC, is Lactation Consultant Coordinator at the Breastfeeding Center of Pittsburgh, a pediatric practice. Ms. Gutowski is a certified International Board Certified Lactation Consultant (IBCLC) and a La Leche League leader. She is a member of the International and United States Lactation Consultant Association, PA Breastfeeding Coalition, Vice Chairman, and La Leche League International to name a few.

Amy L. Holtan, MA, RD, LDN, is a Public Health Nutrition Consultant, Pennsylvania Department of Health, Bureau of Family Health, Division of Women, Infants, and Children (WIC). She is responsible for coordinating various aspects of the WIC Program.

Kathleen L. Hoover, M. Ed, IBCLC, RLC, FILCA, is a Lactation Consultant, Riddle Memorial Hospital, Media, PA. Ms. Hoover is certified as a registered lactation consultant and IBCLC.

Cynthia A. Lucero, MD, is Medical Epidemiologist, Office of Public Health Surveillance and Research, Veteran's Affairs, Pala Alto Health Care System. Dr. Lucero is a Board Certified Pediatrician. She is a member of the Society for Healthcare Epidemiology of America, Association for Professionals in Infection Control and Epidemiology, International Society for Disease Surveillance, and Disease Society of America.

Cynthia E. Maki, BS, MS, is a Public Health Nutrition Consultant, Pennsylvania Department of Health, Bureau of Family Health Division, Division of Women, Infants, and Children. She is responsible for developing the breastfeeding objectives of the WIC agency and externally.

Deborah Moss, MD, MPH, is Assistant Professor, Pediatrics, University of Pittsburgh School of Medicine. Dr. Moss is a Board Certified Pediatrician. She is a member of the AAP, PA Chapter AAP, and Founder-Co-Chair, Pediatric Tobacco Issues, a special interest group.

Todd H. Wolynn, MD, MMM, IBCLC, FAAP, is Executive Director of the Breastfeeding Center, Pittsburgh and the Pediatric Alliance, PC, a pediatric multigroup corporation. Dr. Wolynn is a Board Certified Pediatrician and IBCLC. He is a member of the AAP and PA Chapter, AAP. He serves on many professional committees.

Providing Breastfeeding Support in the Primary Care Setting is Not Only Good Medicine, it's Also Good for the Practice

Todd L. Wolynn, MD, MMM, IBCLC, FAAP

Standard-of-care practice necessitates the support of exclusive breastfeeding of infants for the first six months of life. Breastfeeding support services represent a tremendous unmet medical need, a decisive chance to improve health outcomes, and an enhanced business opportunity for your practice. Smart use of office resources and coding knowledge can improve the health care you deliver and give you a competitive edge.

An Unmet Need

Most lactation services occur in maternity hospital settings. These services typically focus on the inpatients. Once mother and baby are discharged, outpatient services are usually conducted by lactation consultants without medical provider support at hospital lactation centers or by private practice lactation consultants in the community. Without physician/physician extender involvement, the service is rarely covered by insurance and is paid fee-for-service by the family. The lactation consultant's scope of care, which usually focused on "feeding/latching" problems and their solutions, does not permit medical diagnoses and treatment. Maternal or infant medical problems may result in trips back to one or more primary care physicians (PCPs).

Whether for a mother, baby, or both, lactation support provided by a physician and/or physician extender can be billed and reimbursed. Importantly, this type of lactation support can address both mother and baby's needs in a single stop without the need to go to separate

PCP offices. While follow up visits back to your office may be necessary, the continuity of care for the problem is enhanced.

Coding For Breastfeeding Support Services

The types of codes used will depend on the details of the visit. The physician may need to indicate that on the day an "established patient preventative medicine" service (CPT 99391-) for the infant was performed, the patient's condition also involved a significant, separately identifiable "established patient problem-oriented" E/M service (CPT 99211-99215) above and beyond the work associated with a preventive visit to address a breastfeeding issue. This circumstance may be reported by adding modifier-25 to the appropriate level E/M service. Modifier-25 is key to reporting when your work is "significant" and therefore, additionally billable. Without the use of modifier-25, breastfeeding support services offered during a preventive visit may not be adequately represented or reimbursed. You can increase the likelihood that the insurer will pay for both services by organizing your note so that the documentation for the problem-oriented E/M service is separate from documentation for the preventive service.

It is imperative if a pediatric office provides billable breastfeeding care to the mother that appropriate documentation take place. The mother's insurance may need to be investigated to determine if a referral is needed because your primary care practice is not identified as her PCP.

It is also strongly recommended to communicate with the mother's obstetrician/gynecologist (OB/GYN) or PCP to enhance the quality of care delivered.

If the mother is not your primary care patient, medical services rendered to her to address a breastfeeding issue may be reported using the "office or other outpatient new patient" codes (CPT 99201-99205) and billed to her insurance as an encounter separate from the infant's. If a request for a consultation is received from her PCP, OB/GYN, or other appropriate source, an "office or other outpatient consultation" code (CPT 99241-99245) may be reported.

3 R's of a Consultation

- **Requested** service from an appropriate source and need for consultation
- **Rendering** the service
- **Report** with findings and recommendations must be provided to the requesting physician

Consultation codes are typically reimbursed at higher levels due to the added work and expertise involved.

After the initial use of a consultation code, subsequent medical services rendered to the mother would be reported using the "office or other outpatient established patient" codes (CPT 99212-99215).

New and established office codes and new and established preventive medicine codes will be utilized for infants you see depending on the circumstances. Remember that

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once you or your practice have seen the infant in the hospital on rounds and billed for that service, the baby is not considered “new” when seen in your office the baby is considered an established patient.

The appropriate use of coding and billing is ESSENTIAL to operating a successful breastfeeding support service.

Please refer to the American Academy of Pediatrics, **Supporting Breastfeeding and Lactation: The Primary Care Pediatrician’s Guide to Getting Paid** available at <http://www.aapdistrictii.org/BreastCoding.pdf>. This resource is condensed yet complete and can be used as a template for groups intending to integrate breastfeeding services into their practice. The American Academy of Pediatrics, American Medical Association, and other medical organizations also have resources for coding.

How to Integrate the Lactation Consultant into the Physician Practice Visit

International Board of Certified Lactation Consultants (IBCLC) are currently not licensed providers in Pennsylvania and generally are not recognized by most insurance companies, as such. The United States Lactation Consultant Association is coordinating efforts throughout the country to establish licensure for IBCLCs.

Potentially, some IBCLCs can bill commensurate with their background within health care practices and these services can be covered by insurance. Examples include: registered nurse, nurse practitioner, physician assistant, and licensed nutritionist.

Their services may be billed “incident to” another licensed and reimbursable health care professional under established patient visit codes by following criteria required for “incident to” billing. The IBCLC/physician “shared visits” can be very effective and efficient for clinical care. When the physician and IBCLC “share” the same patient, on the same day, their work is combined and billed under the physician at 100 percent of the fee schedule. Visits conducted with physician involvement, including face-to-face time with the patient, oversight, and decision making, qualify for evaluation and management service coding.

Having a lactation consultant as part of your office staff can be very effective depending on the volume of breastfeeding support services you offer. They can offer immense expertise and make the service become cost-efficient. Breastfeeding support sessions may require up to an hour or more. The amount of time actually required by a physician or extender is reduced while the lactation consultant works under their supervision. The key is efficient use of the appropriate personnel to provide these services.

Providing Breastfeeding Support Service in your Office Enables:

- **Standard of Care Medicine with potential significant Health Benefits**
- **A Revenue Source for appropriately provided and coded service**
- **Enhanced care with the integration of a lactation consultant**

Brief Case Example:

A 4-day old infant, 39-week gestational age with normal birth weight, comes in for an established preventive care visit. The history

reveals that the infant is not breastfeeding well and has lost close to seven percent of birth weight. A risk for dehydration and other related complications is acknowledged due to feeding difficulties. The physical indicates adequate hydration and is overall normal.

The mother complains about nipple irritation and pain with nursing. A medical history is taken and physical exam of the mother is completed. No significant medical history issues are present but the mother’s nipples are indeed red and irritated. A breastfeeding session is observed and an improper latch is corrected on the spot with almost instantaneous relief of the mother’s pain associated with nursing. You are confident that the corrected latch will solve the problem. You prescribe a topical treatment to help the mother’s nipples heal.

A follow up visit is scheduled for both the mother and the baby within the next few days.

As shown below, this interaction would be appropriately coded with a preventive 9939X code for the well care, a 25 modifier and a Sick 9921X to reflect the services involved in diagnosing and treating the infant’s feeding problem.

The services utilized to diagnose and treat the mother’s medical problem are appropriately coded with a New Sick 9920X code with diagnosis of Sore Nipples.

Infant Codes

CPT: 99391
(Established preventive < 1 yr)

ICD9: V20.2
(Diagnosis: well care)
25 modifier condition requiring significant and additional work during the well visit

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Smoking and Breastfeeding? What is a Doctor to Do?

Debra L. Bogen, MD, Deborah R. Moss, MD, MPH, and Cynthia Lucero, MD

Introduction to Smoking and Breastfeeding

Evidence to support the diverse benefits of breastfeeding to infants, mothers, and society continues to grow. The Agency for Health Care Research and Quality (AHRQ) Evidence Report, “Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries,”¹ indicated that breastfed infants have lower risk of acute otitis media, atopic dermatitis, non-specific gastroenteritis, obesity, sudden infant death, and hospitalization for lower respiratory infections. Mothers who breastfeed have a lower risk of breast cancer, ovarian cancer, and type 2 diabetes.

Societal benefits of breastfeeding include health care savings,² fewer missed days at work,³⁻⁵ and environmental effects, such as no pollution or waste.

In contrast to breastfeeding, tobacco use continues to be linked to numerous adverse consequences for mothers, infants, and society. Smoking during pregnancy is associated with adverse pregnancy outcomes, including premature birth, low birth weight, and higher incidence of stillbirth.^{6,7} After pregnancy, infants whose mother’s smoke are at increased risk of sudden infant death syndrome,^{8,9} asthma, and hospitalizations for pneumonia and bronchitis.^{10,11}

Despite the preponderance of information about the health risks of smoking, women continue to smoke at alarmingly high rates. Based on national data from 2006, 18 percent of all women report current smoking¹² and 13 percent of women reported smoking during the last three months of pregnancy.¹³

Association between smoking and breastfeeding

Women smokers are significantly less likely to intend to breastfeed and to initiate breastfeeding.¹⁴⁻²³ Smokers also stop breastfeeding sooner than non-smokers.²⁴ Horta in a meta analysis found that among women

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Mother Codes

CPT: 99213
(Establish sick office visit)

ICD9: 779.3
(Diagnosis: feeding disturbance) Mother codes
CPT: 99204
(New sick office visit)

ICD9: 676.34
(Diagnosis: Sore Nipples)

As a physician, the goal is to increase the availability and quality of lactation support services in the primary care setting. The medical community actively helped to disassemble thousands of years of the passing on lactation skills from generation to generation, and it is incumbent upon **US** to make breastfeeding right again!



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who initiated breastfeeding, smokers had a pooled odds ratio of 1.93 (95 percent cumulative incidence 1.55, 2.40) of stopping breastfeeding before three months compared to non-smokers. Physiologic factors that impact milk volume have been proposed as one reason for the difference in breastfeeding rates between smokers and non-smokers.²⁵ Rat models demonstrated a decrease in prolactin release with nursing and decreased milk output and rat pup growth with exposure to nicotine or tobacco smoke. Nicotine increases dopamine, which in turn inhibits prolactin release and increases adrenaline, which in turn decreases oxytocin release. Prolactin is essential for milk production while oxytocin is essential for milk ejection. In a human study, women who smoked at least 15 cigarettes per day had significantly lower basal prolactin levels on days one and 21 post partum than non-smokers but the rise in prolactin measured with nursing was not different between groups. Oxytocin levels were not different between groups in this study.²⁶ Similarly, Hopkinson reported lower milk volumes among smokers expressing milk for their preterm infant than non-smokers.²⁷

Based on epidemiologic data, Donath suggested the difference in breastfeeding rates between smokers and non-smokers is more likely explained by lower rates of breastfeeding intention among smokers than by physiologic factors.²¹ Breastfeeding intention is a strong predictor of actual breastfeeding practice.²⁸ Other possible explanations are that smokers are more likely to perceive their milk supply as insufficient,²⁹ are less health conscious than the

general population, or may have concerns about adverse health effects of smoking on their baby.³⁰ Whatever the etiology, smokers are significantly less likely to initiate or continue to breastfeed.

Smoking and Breastfeeding Initiation Rates in Pennsylvania

Between 2004 and 2006, the number of Pennsylvania resident live births to mothers who smoked prior to pregnancy rose from 32,398 to 32,960, while the rate of live births to mothers who smoked prior to pregnancy but not during pregnancy rose from 24.5 percent to 24.9 percent. Based on data reported on the Pennsylvania certificate of live birth between 2004 and 2006, rates of breastfeeding initiation among women who smoked in the third trimester of pregnancy rose from 35.2 percent to 37.8 percent and varied according to age, ethnicity, and race. Among women in Pennsylvania who smoked during the third trimester of pregnancy, there is a trend towards increasing breastfeeding initiation rates. Asian American women who smoked during the third trimester of pregnancy reported the highest rate of breastfeeding initiation (49.3 percent in 2006) compared with whites (39.2 percent in 2006) and African-American women (28.6 percent in 2006). (Source: Pennsylvania certificate of live birth)

What is known about the effects of smoking and breastfeeding on infant health?

Respiratory Infections:

Many studies have reported maternal smoking and/or lack of breastfeeding as risk factors for respiratory infections or acute respiratory disease hospitalizations in children.³¹⁻³⁵ One recent study examining risk factors for severe bronchiolitis in infants found that breastfeeding less than four

months, exposure to environmental tobacco smoke, and, especially, the combination of the two were significantly associated with severe bronchiolitis and prolonged hospitalization. Importantly, passive smoking did not increase the risk when infants were breastfed for more than four months.³⁶ Findings from a birth cohort study demonstrated that the triad of recurrent lower respiratory tract infection in infancy, maternal smoking, and breastfeeding for less than three months was strongly associated with asthma at ages four and 10 years. The investigators also found that breastfeeding three months or longer attenuated the effect of prenatal smoking on asthma.³⁷ **So what of smoking and breastfeeding?** There is increasing evidence that the incidence of acute respiratory infections in breastfed infants of smoking mothers is decreased compared to formula-fed infants of smoking mothers.^{38, 39}

Colic: Survey based studies, both longitudinal and cross-sectional, have demonstrated that maternal smoking during pregnancy^{40, 41} and after delivery⁴² are associated with an increased risk of infantile colic. On the other hand, some studies have found that breastfeeding is associated with a lower risk of infantile colic^{42, 43} while others have not.⁴⁴⁻⁴⁶ What about studies that look at both infant feeding method and smoking with regard to risk of colic? One study found that exposure to tobacco via breast milk was associated with an increased risk of colic but this study did not control for smoking in pregnancy.⁴⁷ By contrast, Canivet et al found that exclusive breastfeeding was protective against colic, even among infants whose mothers smoked and breastfed.⁴¹ Additional research is needed in this area.

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Infant Sleep: One study has examined the impact of smoking and breastfeeding on infant sleep/wake patterns.⁴⁸ In this study, women and their babies served as their own controls a week apart. The study was conducted in a controlled environment; infants were not exposed to second-hand smoke prior to either study time. Infants spent less time sleeping in the three and a half hours after exposure to tobacco via breast milk than when not exposed. Although this was a small study, its findings are consistent with the current risk reduction strategy to have mothers refrain from smoking immediately before breastfeeding.

Infant Weight Gain: Little found that infants whose mothers smoked and breastfed were heavier at one year of age and had a higher body mass index than infants whose mothers did not smoke and breastfeed or smoked and formula fed.⁴⁹ In a more recent, large, well -designed study, smoking and breastfeeding were not related to infant growth except that infants who were exposed to tobacco during pregnancy and were breastfed showed some “catch-up growth.”⁵⁰

Current Recommendations Regarding Smoking and Breastfeeding

Recommendations about breastfeeding in mothers who smoke have evolved as new data on the relative risk-benefit relationship becomes available. In 2000, the U.S. Department of Health and Human Services (HHS) issued the “HHS Blueprint for Action on Breastfeeding.” **In the section addressing tobacco consumption, it stated, “for**

women who cannot or will not stop smoking, breastfeeding is still advisable, since the benefits of breast milk outweigh the risks from nicotine exposure.”⁵¹

Beginning with the 2001 American Academy of Pediatrics (AAP) policy statement, “The Transfer of Drugs and other Chemicals into Human Milk,” nicotine was removed from the tables of drugs contraindicated during breastfeeding.⁵² In the 2005 policy statement, “Breastfeeding and the Use of Human Milk,” the AAP supported the continuation of breastfeeding among mothers who smoke by stating definitively that smoking is not a contraindication to breastfeeding.⁵³ Other organizations, including the American Academy of Family Physicians (AAFP) and World Health Organization (WHO), have made similar recommendations.⁵⁴ While supporting breastfeeding in the context of maternal smoking, the policies strongly encourage smoking cessation or reduction.^{55,56}

Strategies to Reduce Smoking

The Public Health Service Smoking Cessation Clinical Practice Guideline^{57, 58} summarizes evidence to date on effective cessation interventions by primary care providers. It states that primary care physicians should address the **Five A’s**:

- **A**sk about smoking status of every patient.
- **A**dvice smokers to quit.
- **A**ssess smokers’ readiness to set a quit date.
- **A**ssistance toward cessation.
- **A**rrange additional assistance as needed.

By following these practice recommendations, physicians can significantly reduce smoking rates and the adverse health consequences related with smoking.⁵⁹

In the office-based setting, the clinician can assist all smokers by recommending effective treatment that consists of behavioral management and pharmacotherapy. Behavioral treatment can take many forms, from individual to group counseling and telephone to in-person treatment. Regardless of treatment type, cessation rates increase according to the intensity of treatment. That is, the more intensive the treatment (longer sessions, greater number of sessions) the higher the quit rate.

In addition to counseling, pharmacotherapy is a proven effective component of tobacco dependence treatment. The use of pharmacotherapy, either nicotine replacement therapy (NRT), such as nicotine gum, inhaler, lozenge, patch, or nasal spray or non-nicotine replacement therapy (Bupropion and Varenicline) can triple the likelihood of successful quitting with quit rates of 30-40 percent reported in various pharmacotherapy trials.²⁶⁻²⁸ While counseling and pharmacotherapy are each effective therapies when used alone, it has been shown that the use of counseling with pharmacotherapy augments the cessation rate. Therefore, it is important that physicians identify and refer all smokers and strongly recommend or prescribe pharmacotherapy.

Breastfeeding and Pharmacotherapy for Smoking Cessation

Although the AAP and other organizations encourage discussions with mothers regarding breastfeeding, smoking, and smoking cessation, there have been no formal recommendations regarding NRT or other pharmacologic management of smoking for breastfeeding women.

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However, limited evidence supports the use of NRT during pregnancy⁶⁰ and lactation⁶¹ as a harm reduction strategy although no formal guidelines exist. When used as directed, the 21-mg nicotine patch transfers no more nicotine into breast milk than one pack-a-day smoking while 14- and 7-mg patches and nicotine gum confer less.⁶¹⁻⁶³

Additionally, NRT (specifically the nicotine patch) has no significant influence on infant milk intake.⁶¹ In order to minimize the transfer of nicotine into breast milk, women are encouraged to remove their nicotine patch at bedtime and to refrain from chewing nicotine gum, using a nicotine nasal spray or smoking cigarettes for two to three hours prior to and during breastfeeding.⁶²

Smokers have expressed support for the use of NRT during pregnancy⁶⁴; however, surveys of mothers and physicians have found very low levels of support for NRT use in breastfeeding women. A survey of new mothers found that only two percent of nonsmoking mothers and four percent of smoking mothers agreed that a breastfeeding woman could use NRT.³⁰ Physician surveys have found as few as 15 percent of pediatricians believe all forms of NRT to be safe with breastfeeding and fewer still (five to 11 percent) would recommend or prescribe NRT for lactating smokers.^{65, 66}

There is also very limited published data on the two non-nicotine medications available for the treatment of tobacco dependence (Bupropion/Zyban[®] and Varenicline/Chantix[™]) in lactating women.⁶⁷⁻⁷⁰ When more definitive information is available regarding the safety of NRT and the non-nicotine prescription medications for smoking

cessation, recommendations on the use of these products should be incorporated into breastfeeding guidelines.

Data continue to emerge regarding use of medication and breastfeeding. In one survey, 40 percent of pediatricians report using the Physicians' Desk Reference (PDR) when considering breastfeeding and medication decisions. While the PDR is a good general pharmaceutical reference, it is considered a poor source of information about the potential effects of medications on a lactating mother or her infant.²⁴ It contains information from package inserts produced by pharmaceutical manufacturers, based on their product studies. Since manufacturers rarely conduct their own studies on lactating women, package inserts generally recommend that the medication not be taken while breastfeeding, even when studies have been done by others. Physicians should be aware of this limitation and utilize resources that contain more comprehensive lactation safety information. For example, the National Library of Medicine Drugs and Lactation Database, (LactMed), <http://toxnet.nlm.gov/cgi-bin/sis/htmlgen?LACT> is a reliable and free on-line resource.²⁵

What is the Physician's Role?

Improving maternal smoking cessation rates and breastfeeding rates are important challenges for many states, including Pennsylvania. Nationwide, eight-35 percent of breastfeeding mothers are smokers.^{15, 17, 18} Studies by the Annie E. Casey Foundation ranked Pennsylvania cities among the worst in the nation for maternal smoking rates for more than a decade.^{19, 20} While Pennsylvania has high rates of smoking during pregnancy, it has lower rates of breastfeeding initiation (69 percent) and duration at six

months (38 percent) than national rates and the Healthy People 2010 objectives.²¹ Physicians who work with women of child bearing age have an opportunity to both promote breastfeeding and smoking cessation and may be called upon to give advice regarding smoking cessation and the safety of breastfeeding for smoking mothers.

However, survey data of health care providers' practices suggest that there is room for improvement. Oncken et al. surveyed obstetrical and pediatric providers in the Boston area and found that only 58 percent of obstetrical providers and 34 percent of pediatric providers discussed risks and benefits of NRT with pregnant or lactating mothers. Among women in a controlled trial of telephone counseling for smoking cessation that did not include medication, 29 percent reported discussing a cessation medication with their obstetric providers.⁷¹ Surveys of adult smokers have also reported low rates of smoking cessation medication recommendations and prescriptions to parental smokers during child health care visits by both pediatricians and family physicians.^{72, 73} In one study, 15 percent of smoking parents had pharmacotherapy recommended and eight percent received a prescription for a smoking cessation medication by their child's physician.⁷²

Parents are receptive to physicians talking to them about smoking cessation.^{74, 75} Mothers are equally as likely to ask their own physician as their child's physician for advice on smoking and breastfeeding.³⁰ Other studies have found that most parents believe it is an important part of a pediatrician's job to ask about a parent's smoking status.³⁹ Surveys of smoking parents have found that most wanted some kind of smoking

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| Resources for Patients | What they provide |
|--|--|
| <p>Pennsylvania 24-hour Free Quitline 1-800-QUIT-NOW http://1800quitnow.cancer.gov/</p> | <p>Phone is staffed by clinically trained counselors. Callers are referred to a counselor and are mailed an appropriate booklet based upon their readiness to make a quit attempt. Special materials are also available for spit tobacco users and pregnant women. In Pennsylvania this quitline is supported by the Pennsylvania Department of Health (DOH).</p> <p>Physicians may order free materials from the Quitline.</p> |
| <p>Determine to Quit http://www.determinedtoquit.com/</p> | <p>This DOH website offers support and help with quitting smoking. Individuals can click on the "Community Support and Resources" button to find programs in their own community.</p> |
| Resources for Providers | |
| <p>Physician Smoking Cessation Counseling Education http://www.paahec.org/</p> | <p>The Pennsylvania Area Health Education Center offers this free online program.</p> |
| <p>Smoke-Free Homes http://www.kidslivesmokefree.org/</p> | <p>The website is intended to provide resources, information, ideas, and opportunities for collaboration for pediatric clinicians.</p> |
| <p>Smokefree.gov http://www.smokefree.gov/</p> | <p>CDC sponsored webpage with quit support materials, links to on-line chat and telephone counselors, research trials/studies, and print materials.</p> |
| <p>Treatobacco.net http://www.treatobacco.net</p> | <p>Treatobacco.net provides evidence-based data and practical support for the treatment of tobacco dependence. It is aimed at physicians, nurses, pharmacists, dentists, psychologists, researchers, and policy makers. Treatobacco.net is produced and maintained by the Society for Research on Nicotine and Tobacco, in association with the World Bank, Centers for Disease Control and Prevention, the World Health Organization, the Cochrane Group, and a panel of international experts.</p> |
| <p>NIDA InfoFacts: Cigarettes and Other Tobacco Products http://www.drugabuse.gov/Infobox/tobacco.html</p> | <p>This NIDA InfoFact sheet discusses statistics associated with smoking and tobacco use, health hazards, promising research, and treatments that are available to help smokers quit. It is also available in Spanish.</p> |
| <p>Treating Tobacco Use and Dependence, 2008 Update: Clinical Practice Guideline http://www.ahrq.gov/path/tobacco.htm</p> | <p>A comprehensive document, this guideline contains evidence-based strategies and recommendations designed to assist clinicians, tobacco dependence treatment specialists, and others in delivering and supporting effective treatments for tobacco use and dependence.</p> |
| <p>Help for Smokers and Other Tobacco Users http://www.ahrq.gov/consumer/tobacco/helpsmokers.htm</p> | <p>Available in both English and Spanish, this booklet is a companion of the "Treating Tobacco Use and Dependence: 2008 Update" Clinical Practice Guideline. It is written in an easy-to-understand format and includes educational and motivational messages and resources to help patients/consumers quit smoking.</p> |
| <p>HealthCare Provider Reminder Systems, Provider, and Patient Education: Action Guide http://www.prevent.org/content/view/full/159/178/</p> | <p>This CDC guide helps health care delivery systems to improve the delivery of tobacco use treatment to patients.</p> |
| <p>Guide to Community Preventive Services: Tobacco Use and Control http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/comguide.htm</p> | <p>This guide, released by the CDC in 2001, provides recommendations to decision makers about the types of interventions most appropriate for reducing tobacco use and exposure for different populations. Recommendations are based upon the strength of the evidence for each intervention type according to a systematic review process and are helpful to decision makers when selecting an intervention for specific groups or individuals.</p> |
| <p>National Tobacco Cessation Collaborative http://www.tobacco-cessation.org/</p> | <p>The purpose of the NTCC web site is to provide in one place the best available information on tobacco cessation. This information comes from the many agencies and organizations working to increase tobacco cessation in the United States and Canada.</p> |

Integrating Lactation Support Providers into Pennsylvania Health Care Practices

Judith L. Gutowski, BA, IBCLC

Most patients seek information and guidance about breastfeeding from their health care provider. The importance of the provider's recommendations should never be underestimated. Maternity and pediatric care providers have a profound influence on breastfeeding initiation, exclusivity, and duration. Their opinions and advice provide crucial support that is critical to breastfeeding success. Collaboration among physicians, other health care professionals, and lactation specialists achieves coordinated and optimal care for breastfeeding families.

Background and Need

The provision of timely and appropriate lactation support has been shown to increase the likelihood of successful breastfeeding and improve duration.^{1, 2, 3} Early lactation difficulties are common, even in women who are highly motivated to breastfeed and who receive lactation guidance during the hospital stay.⁴ It is estimated that 30 percent of breastfeeding women require professional assistance to overcome problems and 81 percent have general breastfeeding concerns.⁴

Breastfeeding has both immediate and long-term health benefits.⁵ Pennsylvania's breastfeeding rates for 2005 were 71 percent at birth, 36 percent at six months, and 16 percent at 12 months.⁶ These low rates reflect the many physical and social barriers that women face in order to continue to breastfeed. Lack of support services for breastfeeding can result in unnecessary use of formula, premature weaning, or bottle-feeding pumped milk with far-reaching consequences to the health of women and children.

Ideally, all pregnant women would begin to receive lactation care during the first trimester of pregnancy. After birth, rather than providing episodic breastfeeding support (the current "crisis intervention" model), there would be a continuous care process aimed at eliminating barriers to breastfeeding, providing education, preventing problems, and enhancing maternal confidence.^{2, 3, 7} This process would continue until the time of weaning.³⁶

Today, most women find they are inundated with lactation support on postpartum day one, but at one month they may have to contact as many as six providers before finding

help with breastfeeding.⁸ Breastfeeding challenges can be complex, and some mother/baby pairs need more services than others. Community resources and comprehensive lactation care are scarce in many geographical areas in Pennsylvania. It is the physician's role to know the breastfeeding services that are available in the community and to refer mothers for the appropriate level of service.

Health care providers

Research shows that the role of the health care provider is critical to breastfeeding success.^{2, 3, 7, 9, 10} To increase breastfeeding duration, health care provider practices must be able to identify and solve breastfeeding problems. The American Academy of Pediatrics (AAP), American College of Obstetrics and Gynecology (ACOG), American Academy of Family Physicians (AAFP) and the Academy of Breastfeeding Medicine (ABM) have provided guidelines for the optimal level of breastfeeding support in a health care provider practice.

The AAP Policy statement on "Breastfeeding and Human Milk" recommends, "a formal, observed evaluation of breastfeeding, including
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Smoking and Breastfeeding?

What is a Doctor to Do?

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cessation help from the pediatrician's office and the majority feel it would be acceptable if their child's doctor prescribed or recommended it to them.^{23, 39, 74}

Improving health care providers' willingness to have these discussions during routine health care visits, including child health visits, could lead to improvements in both breastfeeding and smoking cessation rates. Efforts are needed to increase health care providers' practices of smoking cessation counseling and offering proven cessation aids.

The table on page 11 provides information about available resources to help Pennsylvania practitioners aid mothers to quit or reduce their smoking and support breastfeeding.

**References are available at
www.pamedsoc.org/
counterdetails or by calling (800)
228-7823, ext 7806.**

Integrating Lactation Support Providers into Pennsylvania Health Care Practices

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position, latch, and milk transfer” at the first pediatric visit, between three to five days of age.⁵ During this visit the breastfeeding dyad should also be assessed for risk factors that endanger successful breastfeeding. A referral for comprehensive lactation assessment and plan of care is appropriate for one or more risk factors:

- ≤38 weeks gestation
- Baby not latching-on or latch difficulty
- Nipple or breast pain
- Jaundice
- Infant weight loss > seven percent of birth weight
- Use of any breastfeeding aid: nipple shield, supplemental nutrition system, breast shells
- Infant with a medical diagnosis likely to affect normal feeding, for instance, a baby with Down syndrome, cleft palate, cardiac condition, etc.
- Woman with a medical condition likely to affect lactation, for instance, a history of breast surgery, hypothyroidism, polycystic ovarian syndrome, profound obesity, etc.

A follow-up visit at two to three weeks after birth confirms that the baby is gaining weight.

Frameworks for creating a breastfeeding-friendly physician office have been written by the Academy of Pediatrics, (“Ten Steps to Support Parents’ Choice to Breastfeed Their Baby, Breastfeeding Promotion in Physicians’ Office Practices”)¹¹, and the Academy of Breastfeeding Medicine (Clinical

Protocol #14 “Optimizing Care for Infants and Children”)¹². Providers can use these tools to analyze current office practices and commit to implementing these quality improvement steps.

Many primary care providers have not received formal training in lactation, although some pursue it on their own. There is a wealth of evidence that many physicians feel uncomfortable and are inadequately prepared to work hands-on with breastfeeding problems.^{13, 14, 15} Additionally, effective lactation interventions require long term and time-intensive strategies.³ Primary care providers work under increasing resource and time constraints making it difficult to provide thorough lactation support.

Support from an International Board Certified Lactation Consultant (IBCLC)

International Board Certified Lactation Consultants (IBCLCs) have demonstrated specialized knowledge and clinical expertise in breastfeeding and human lactation and are certified by the International Board of Lactation Consultant Examiners (IBLCE). They typically deal with breastfeeding problems and come from a variety of backgrounds including nurses, midwives, family physicians, pediatricians, obstetricians, childbirth educators, dietitians, occupational and physical therapists, experienced mother support counselors, and others. They work in a variety of settings including hospitals, neonatal intensive care units, lactation clinics, maternal and child health services, WIC, corporations, physicians’ offices, and private practice.¹⁶

Several studies have shown an increase in breastfeeding duration with the employment of IBCLCs. The clinical practice of the IBCLC consists of systematic problem-solving in collaboration with breastfeeding mothers and other members of the

health care team. This practice is defined in the “Clinical Competencies Professional Standards for IBCLCs.”⁷

Table 1 on page 14 identifies core areas of competency for IBCLCs.

The IBCLC employed within a health-care practice can receive insurance reimbursement for their services through “incident to” billing under the physician or through billing under other credentials they may have.¹⁸ Those who are in private practice usually bill their clients directly and provide documentation for the client to seek reimbursement on their own. However, it is difficult to obtain reimbursement for independently bill-

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“Ten Steps to Support Parents’ Choice to Breastfeed Their Baby, Breastfeeding Promotion in Physicians’ Office Practices,” AAP 1999, revised 2003

1. Make a commitment to the importance of breastfeeding.
2. Train all staff in skills to support breastfeeding.
3. Inform women about the benefits and management of breastfeeding.
4. Assess infants during early follow-up visits.
5. Encourage mothers to breastfeed on demand.
6. Show mothers how to breastfeed and maintain lactation when they will be away from their babies.
7. Provide anticipatory guidance to support exclusive breastfeeding for the first six months of life.
8. Provide accurate information on maternal issues to support breastfeeding.
9. Communicate support of breastfeeding in office environment.
10. Expand the network of support for breastfeeding.

Integrating Lactation Support Providers into Pennsylvania Health Care Practices

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ing IBCLCs, either because lactation support is not considered a medical necessity, or because it is not a covered benefit. A document about insurance coding for lactation support services is provided by the AAP and can be found at <http://www.aap.org/breastfeeding/CODING.pdf>.¹⁹

Breastfeeding educators

A second group of professionals who can provide breastfeeding support are breastfeeding educators (or other titles found in Table 2, see page 15). These health workers have received training in basic breastfeeding support skills. This training is typically a 15- to 45-hour course that covers the normal course of breastfeeding, with particular attention given to

knowing one's limits and when to refer. The lay support groups and peer counselors found in many communities also provide ongoing support and encouragement for normal breastfeeding and refer women with problems to their primary physician or a lactation consultant.

Community breastfeeding groups

La Leche League Leaders are mothers who are members of La Leche League International, have breastfed at least one child for at least nine months, and have undergone an accreditation process that includes training and education about breastfeeding management, parenting, child development, and communication skills. La Leche League Leaders are volunteers.²⁰ They assist breastfeeding women in their community. In Pennsylvania there are several other nursing mothers' organizations with

breastfeeding counselors similar to La Leche League Leaders.

The basic services provided by these two latter groups are not sufficient for solving all of the problems that cause mothers to wean prematurely. If there are no IBCLCs in the area, the surest way to know that families will find the care they need is for a physician or someone in the physician's office to obtain extra training in clinical lactation support skills for breastfeeding challenges. For example, an online course is available at <http://www.breastfeedingtraining.org> and provides CME.²¹

The American Academy of Pediatrics recommends identifying, utilizing, and referring to all of the available types of breastfeeding support described above.^{5,12} It is in the best interest of health care providers and their patients to develop working

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Table 1: Core areas of competency for International Board Certified Lactation Consultants

| Skills For Normal Course of Breastfeeding | Skills For Maternal Breastfeeding Challenges | Skills For Infant Breastfeeding Challenges |
|--|---|--|
| <ul style="list-style-type: none"> Assess adequate milk intake Normal infant sucking patterns Maintaining milk production Normal newborn behavior Sleepy newborn Importance of exclusive human milk feedings Prevention and treatment of engorgement Mother/baby separation Milk expression techniques Collection, storage, and transportation of milk SIDS prevention behaviors Family planning methods and breastfeeding Planning follow-up care for breastfeeding Community resources for breastfeeding | <ul style="list-style-type: none"> Insufficient milk supply: perceived and real Flat/inverted nipples Prevention and treatment of sore nipples, plugged duct, or nipple pore Mastitis Overproduction of milk Breast surgery or trauma Cultural beliefs that interfere with breastfeeding Medical conditions that impact breastfeeding Adolescent mother Postpartum psychological issues Weaning Induced lactation and relactation Death of an infant | <ul style="list-style-type: none"> Traumatic birth 35-38 weeks gestation Small for gestational age Large for gestational age Multiple births Preterm birth Hypoglycemia Sleepy infant Excessive weight loss Slow/poor weight gain Hyperbilirubinemia Ankyloglossia Colic/fussiness Gastric reflux Lactose overload Food intolerances Neurodevelopmental problems Teething and biting Infant with dysfunctional suck Cranial-facial abnormalities, i.e., micrognathia, cleft lip and/or palate Down syndrome Cardiac problems Chronic medical conditions, i.e., cystic fibrosis, PKU |

The Impact of the New Women, Infants, and Children (WIC) Food Packages on Breastfeeding Promotion and Support

Amy L. Holtan, MA, RD, LDN, Martha Kautz, RNC, BS, IBCLC, RLC, and Cynthia Maki, MS, RD

The Women, Infants, and Children (WIC) food package¹ is changing. Supplemental foods offered by the WIC program have not changed since 1980. Beginning in October 2009, foods offered to all women, infants, and children through the Pennsylvania WIC Program will better align with the current Dietary Guidelines for

Americans² as well as current infant feeding practice guidelines of the American Academy of Pediatrics (AAP).³ They also allow for participant and cultural preferences.

Foods originally on the WIC program addressed public health needs, such as anemia and low protein intake. Today's public health needs are fo-

cused on mitigating health problems associated with overweight and obesity and increasing the intake of whole grains and dietary fiber. The food package is also being changed to decrease the health risks associated with use of supplemental formula while breastfeeding.

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Integrating Lactation Support Providers into Pennsylvania Health Care Practices

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relationships among people and organizations who have the mission to promote, support, and protect breastfeeding. All health care provider staff should be familiar with the local resources and know how to refer patients for breastfeeding support. In particular, office nurses and medical assistants who triage phone calls and have frequent patient interaction should understand the risk factors for lactation problems and know how they are managed within their practice setting. They should also know when and how to provide referrals for resources outside of the practice setting.

Breastfeeding support providers in your area of Pennsylvania can be found at <http://www.pawic.com/breastfeeding-guide.pdf>

You may also refer to these online resources for finding breastfeeding support providers:

- **International Board Certified Lactation Consultant (IBCLC) searchable database**—not

all ILCA members provide outpatient services.
<http://www.ilca.org/falc.html>

- **La Leche League Leaders**—to aid with the normal course of breastfeeding and basics.
<http://www.llli.org/Web/Pennsylvania.html>
- **WIC Agencies**
<http://www.pawic.com/localagency.html>

Table 2: Titles often used by breastfeeding support professionals

- Breastfeeding specialist
- Lamaze international breastfeeding support specialist
- Breastfeeding counselor
- Breastfeeding educator
- Certified breastfeeding educator (CBE)
- Early breastfeeding care specialist/doula breastfeeding training
- Certified lactation educator
- Certified lactation counselor (CLC)
- WIC peer counselor

Pennsylvania Pediatric Office with Breastfeeding-Friendly Best Practice

The Breastfeeding Center of Pittsburgh has developed a model for providing comprehensive lactation support within a pediatric office. Six of the eight pediatricians and a pediatric nurse practitioner are (International Board Certified Lactation Consultants (IBCLCs) and the practice employs five additional IBCLCs. A breastfeeding baby's initial visit usually lasts one to one and a half hours and consists of a history, physical exam of the infant and the mother's breasts, and observation of a feeding. A physician with IBCLC certification or an IBCLC who consults with a physician does the assessment. The team develops a plan with the parents.

When there is a problem, the babies are seen for on-going, frequent appointments until the problem resolves. Whether or not early follow-up visits are needed, all breastfeeding infants have an ambulatory visit at two to three weeks of age to monitor weight gain and provide additional support and encouragement to the mother during this critical period. More information can be found at: <http://www.pediatricalliance.com/index.cfm>

The Impact of the New Women, Infants, and Children (WIC) Food Packages

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This article focuses on the impact of the new food packages on breastfeeding promotion and support. The food package changes, which pertain to breastfeeding mothers and infants, facilitate WIC and health care provider efforts to promote and support the establishment of exclusive and long-term breastfeeding.

Lack of breastfeeding can set children up for risk factors for ill health. The life-long impact can include poor school performance, chronic diseases, impaired intellectual and social development, and reduced productivity.⁴

Studies conducted in industrialized countries have shown that the risks associated with not being breastfed for at least six months include:

- 3.5 times more likely to be hospitalized for respiratory infections
- 2 times more suffer from diarrhea
- 1.6 times more ear infections
- 1.5 times more likely to become overweight during childhood.⁵

Health care providers play a primary role in promoting and supporting exclusive and long-term breastfeeding among their patients.⁶ It is important to note that there is an inverse relationship between the amount of formula given and degree of health risk. The more human milk that is substituted with formula, the higher the sum of health consequences. The WIC program will assist your patients to achieve a successful breastfeeding experience by providing counseling and education, issuing breast pumps to women who meet WIC criteria, and providing additional foods for both mom and infant older than six months. Specifically, begin-

ning in October 2009, women who exclusively breastfeed will receive additional amounts of milk, eggs, fruits, and vegetables and are the only WIC participant type who automatically receive cheese and canned fish.

Fully breastfed infants (WIC's term for exclusive breastfeeding) will receive twice the amount of baby fruits and vegetables and will be the only infants who will receive baby meats.¹ Additional food for the mother is an additional value of \$25 per month between birth of the infant and five

months. Additional foods available on the fully breastfeeding mother and infant package is an additional value of \$65 per month between month six and 11.

New WIC Guidance Related to Breastfeeding and Formula Issuance

In order to reduce the risk of breastfeeding failure, the new USDA food package rules stipulate that NO

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Food Packages

Fully (exclusively) breastfeeding mother and infant

0-5 months: Mother additional value of \$25 of foods per month

6-12 months: Mother and infant additional value of \$65 of foods per month

New United States Department of Agriculture

Starting October 2009

Infant Foods/Month –

No foods issued for infants younger than 6 months of age

| Food Category | Fully (exclusively) breastfed | Formula fed |
|------------------|-------------------------------|----------------------|
| Infant cereal | 24 ounces | 24 ounces |
| Fruit/vegetable* | 64 jars (256 ounces) | 32 jars (128 ounces) |
| Meat* | 31 jars (77.5 ounces) | None |

* New food or changed amounts

Mother Foods/Month

| Food category | Issued birth of infant to 12 months | Issued birth of infant to six months |
|-----------------------|-------------------------------------|--------------------------------------|
| | Fully (exclusively) breastfeeding | No breastfeeding |
| Milk* | 24 quarts | 16 quarts |
| Cereal | 36 ounces | 36 ounces |
| Cheese* | 1 pound | None |
| Juice* (12 oz. conc.) | 3 cans | 2 cans |
| Eggs | 2 dozen | 1 dozen |
| Peanut butter | 18 ounces | None |
| Beans* (1 pound can) | 4 cans | 4 cans |
| Canned fish* | 30 ounces | None |
| Whole grains* | 16 ounces | 16 ounces |
| Fruits/vegetables* | \$10 voucher | \$8 voucher |

* New food or changed amounts

The Impact of the New Women, Infants, and Children (WIC) Food Packages

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formula will be issued the FIRST month of life. Health care providers are encouraged to promote exclusive breastfeeding with support and referral during this vulnerable period.

In order to promote the enhanced food packages and decrease the health risks related to formula supplementation, Pennsylvania WIC guidance regarding formula issuance to breastfed infants is undergoing major change. **The following guidelines are under consideration:**

- Before issuing any formula, all WIC mothers will be encouraged to express and provide their own milk, instead of formula.
- Health care providers are encouraged to promote and support the same.
- Mothers who meet WIC criteria will be issued a breast pump and provided with education on pumping and storing human milk.
 - Pumps cannot be issued to participants who do not meet WIC criteria and the type of breast pump is also issued by set criteria.
- In cases of medical need, such as inadequate weight gain, the amount of standard or hydrolyzed protein formula shall be issued by breastfeeding and infant growth assessment according to appropriate weight gain patterns for breastfed infants and WIC criteria (definition and discussion to the right).
 - Adequate formula will be issued to participants with medical need, during the time of medical need. Resolution

of breastfeeding problems and return to exclusive breastfeeding is the goal.

- Special formula will continue to be provided by prescription and specified medical condition.
- When formula is needed for life situations, such as an unsupportive workplace, formula will be

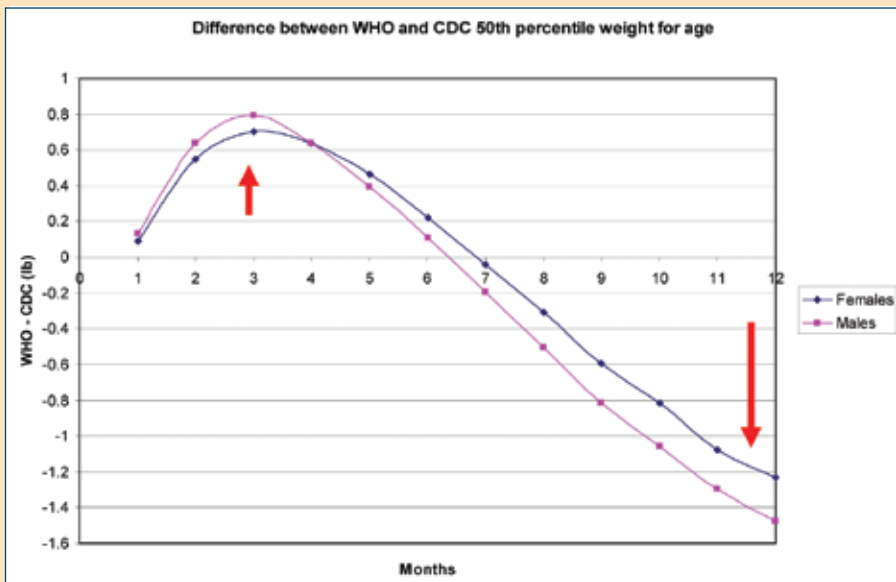
provided according to the number of missed breastfeedings.

- Amount of formula will be issued according to the nutritional needs of the child.
- If the participant wants formula for personal reasons, WIC will

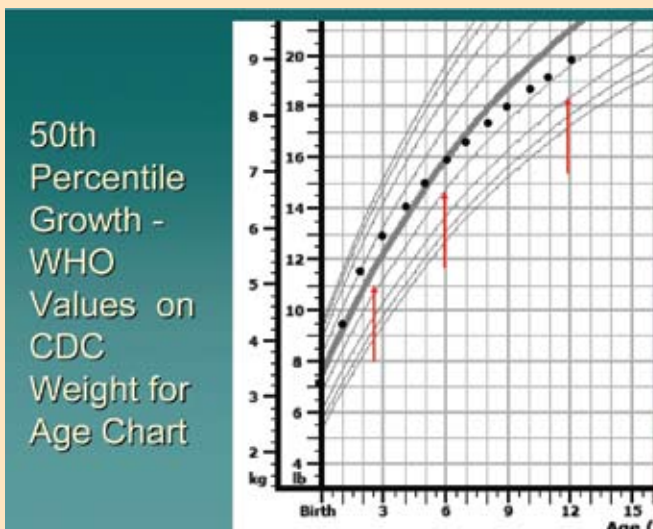
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Difference in Weight Gain Pattern Between WHO and CDC Growth Charts At 50th Percentile Weight for Age

It is normal for the exclusively breastfed infant to be ½ to ¾ pounds heavier than the formula fed infant at 3 months of age but ¾ to 1 ½ pounds lighter than a formula fed infant by one year of age.



Gungor D. and Bartok C. Center for Childhood Obesity Research, Pennsylvania State University, 2008



Kautz, M., 2008, PA Department of Health

What appears to be faltering growth on the CDC chart is actually normal growth for the exclusively breastfed infant.

The Impact of the New Women, Infants, and Children (WIC) Food Packages

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encourage that she purchase it on her own, so she and her infant can receive the enhanced benefits of the fully breastfeeding food packages. The cost of small amounts of formula will be far below the cost of the additional foods received.

- Health care providers are encouraged to promote exclusive, fully breastfeeding.
- Unless medically needed, participants who request formula shall be informed of the health consequences, the potential for early weaning, and the potential for initiating breastfeeding problems.
- Health care providers are encouraged to help increase public awareness.

As you can see by these guidelines, health care providers play a primary role in promoting exclusive and long-term breastfeeding among their

Health care providers play a primary role in promoting and supporting exclusive and long-term breastfeeding among their patients.

patients and supporting the success of these important public health measures.

Determining Need by Growth

The growth of an infant is strongly linked to how he or she is fed. Current growth reference charts⁷ are based on formula fed and combination fed infants. Therefore the current charts are based on how children grow. The variable of *how* infants were fed was not controlled in the development of these charts. Newer evidence-based research shows that breastfeeding is the biological norm and the breastfed infant is the standard for measuring healthy growth.⁸ Charts developed based on this research demonstrate how infants *should* grow.⁴ One of the major differences between these two growth charts is that between zero to three months breastfed

infants exhibit a more rapid weight gain pattern than formula fed infants. However, between four and 12 months, the breastfed infant weight gain pattern slows considerably compared to formula fed infants. Therefore, when exclusively breastfed infants are plotted on current growth charts their growth appears to falter between four and 12 months. It is normal for the exclusively breastfed infant to be three quarters to one and a half pounds lighter than a formula fed infant at one year of age. See charts on page 17.

WIC assessment criteria relies on evidenced-based research, which is used to determine adequacy of infant growth. WIC determines growth on patterns, not on a single measurement. According to WIC criteria, infants who fall at or above minimum weight gain standards are considered to have an adequate growth pattern. The weight gain chart that Pennsylvania WIC will be using as a **minimum** to assess growth for healthy full-term exclusively breastfed infants, which is based on USDA child growth standards and AAP recommendations is included.

Exclusive long-term breastfeeding results in maximum health benefits and maximum amount of supplemental foods for mother and baby. The Pennsylvania WIC program looks forward to your support. WIC will continue to work with providers to promote exclusive breastfeeding throughout Pennsylvania.

Contact Cynthia Maki, Pennsylvania State WIC Breastfeeding Coordinator at, (717) 783-1289 or cmaki@state.pa.us for questions.

References are available at www.pamedsoc.org/ counterdetails or by calling (800) 228-7823, ext 7806.

Minimum Weight Gain Patterns of Healthy Full-term Exclusively Breastfed WIC Infants

| Age | Weight Gain Pattern |
|-------------|--|
| 0-2 weeks | <ul style="list-style-type: none"> • Lose and regain birth weight • Back to birth weight by 2 weeks • Three weeks in cases of delayed lactogenesis such as C-section, early latch-on/suck difficulties, maternal/infant complications |
| 3-4 weeks | > 7 oz/week |
| 1-3 months | 1 ¼ lb or more/month (5 oz/wk) |
| 4-6 months | ¾ lb or more/month (3 oz/wk) |
| 7-12 months | ½ lb or more/month (2 oz/wk) |

Pennsylvania WIC 2008, based on 2001 USDA WIC Nutrition Risk Criteria for Inadequate Growth.⁹ Adapted from Academy of Pediatrics, *Average of Mean Values for Published Gains in Weight for Healthy Exclusively Breastfed Infants*, 2006.⁶

Breastfeeding Support in the Primary Care Setting: Post-Test

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The Pennsylvania Osteopathic Medical Association, an American Osteopathic Association accredited sponsor for continuing medical education, has designated this activity for 3 credit hours in Category 2B.

To earn CME credit for this activity, you must score 70 percent or higher on the quiz. To be eligible for Category 1 CME credit, quizzes with **completed evaluations** must be completed online or faxed (717)-558-7848 or mailed no later than December 31, 2011, to:
The Pennsylvania Medical Society, 777 East Park Drive, P.O. Box 8820, Harrisburg, PA 17105-8820

Enduring Material: Expires December 31, 2011

Name _____ Signature _____

Address _____

Cindy Jones, who is 5 feet, 3 inches tall and weighs 240 pounds, is a 28 year old female who presents during her first trimester. This is her second pregnancy. Her first child, now age 3, was born three weeks early through a vaginal delivery. During your discussion, she tells you he was hospitalized within the first three months of his life for a respiratory infection, but she is not specific about what caused the infection. She bottle-fed him partly because she thought she could not breastfeed because she smokes one to two packs of cigarettes per day. She tells you that her doctors three years ago did not talk to her about breastfeeding. She has chosen to stay at home while her children are young, and due to family income, qualifies for and is enrolled in the WIC program.

- With regard to smoking, which of the following facts would you share with Cindy?
 - Smoking mothers usually produce the same volume of breast milk as nonsmoking mothers so it is OK to breastfeed if you are a smoker.
 - Smoking increases incidence of stillborn births, increases number of premature births, and results in lower birth weight of baby.
 - The infant of a smoker is more irritable than the infant of a non-smoker.
 - A and C
 - B and C
 - A, B, and C
- With regard to breastfeeding, which facts would you share with Cindy?
 - Lower incidence of ovarian cancer, breast cancer, and Type 2 diabetes for a breastfeeding mom.
 - Non-smoking mothers typically breastfeed three months longer than smoking mothers.
 - Infants who are breastfed for at least six months are less likely to suffer from diarrhea and ear infections.
 - Infants whose mothers don't smoke have an increased risk of sudden infant death syndrome, asthma, and hospitalizations for pneumonia and bronchitis.
 - A, B, C
 - B, C, D
 - A, C, D
- You advise Cindy that the WIC Program will implement changes in October 2009 for women who exclusively breastfeed to better align with current infant feeding practice guidelines. Which of the following are new benefits that Cindy can expect if changes are made in October 2009?
 - Additional amounts of milk, eggs, fruits, and vegetables
 - Cheese and canned fish
 - Twice the amount of baby fruits and vegetables, and infants will receive baby meats
 - Extra formula for the infant in the first month of life
 - A, B, C
 - A, C, D
 - A, B, C, D
- While all lactation care is recommended for all women during the first trimester of pregnancy, Cindy is a candidate for a comprehensive lactation evaluation due to the following risk factors: (Check all that apply)
 - Asthma
 - Obesity
 - GERD
 - Low income
 - Early delivery 37 ½ weeks
 - Hiatal hernia
- Practices that are successful in promoting a breastfeeding-friendly culture have implemented which of the following strategies? (Check all that apply)
 - Provide a private space for mother to breastfeed
 - Encourage exclusive breastfeeding for the first six months of baby's life
 - Provide patient education materials
 - Train staff about the health benefits and challenges to breastfeeding
 - Consider utilization of lactation consultants
 - A, B, and D only
 - A and E only
- Breastfeeding is not advisable for smoking mothers because the benefits of breast milk do not outweigh the risks from nicotine exposure.

True False
- Breastfeeding support services offered during a preventive visit may be reimbursed with the use of Modifier 25 and documentation for the problem-oriented E/M service separate from the preventive service.

True False
- When the physician and a certified lactation consultant "share" the same patient, on the same day, their work is combined and billed under the physician rate at 100 percent of the fee schedule.

True False
- The duty of a health care provider is to actively encourage families to breastfeed and to reduce social disparities of breastfeeding because of the positive outcomes for the infant.

True False



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777 East Park Drive, PO Box 8820
Harrisburg, PA 17105-8820
(800) 228-7823 • (717) 558-7806
fax: (717) 558-7848
Email: blayne@pamedsoc.org

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Evaluation:

Breastfeeding Support in the Primary Care Setting - The following evaluation will guide the development of future programs for Pennsylvania clinicians. Please take a few moments to reply and fax your response to (717) 558-7848.

1. Using a rating of 1-5, with 5 meaning very satisfied and 1 not satisfied at all, please identify whether the monograph met the following objectives to enhance the primary care clinicians ability to:

| | Very Satisfied | | Not Satisfied at All | | |
|--|----------------|---|----------------------|---|---|
| Apply the basic principles of breastfeeding to provide anticipatory guidance, support, and resources to facilitate breastfeeding exclusively for the first six month, and thereafter with the introduction of other foods for up to one year as long as mutually desired by mother and baby. | 5 | 4 | 3 | 2 | 1 |
| Manage common breastfeeding problems and challenges, i.e., milk supply, breast soreness, return to work, bearing in mind the impact of health care professionals' attitudes and recommendations on a family's decision to initiate and continue breastfeeding. | 5 | 4 | 3 | 2 | 1 |
| Identify some of the current gaps in the management of Breastfeeding | 5 | 4 | 3 | 2 | 1 |
| Gain skills to identify appropriate communication or strategies to support and promote breastfeeding among mothers who smoke and provide assistance to quit. | 5 | 4 | 3 | 2 | 1 |
| Describe the adverse effects of secondhand smoking on children, provide counseling to families to reduce tobacco exposure and quit smoking, and utilize community resources and the PA Quitline. | 5 | 4 | 3 | 2 | 1 |
| Develop a plan for practice improvement, (i.e., related to office policy and practices), that optimizes outcomes for families related to breastfeeding and tobacco cessation and promotes continuing education among staff. | 5 | 4 | 3 | 2 | 1 |

2. Was the information provided in an unbiased, credible manner?

Yes No

If No, why is it biased? _____

3. With regard to the strategies, processes, or procedures presented in this educational activity about breastfeeding in the office setting, what behavior or practice(s) protocol will you change or what new strategy or procedure will you implement in your practice as a result of your participation in this activity?
- _____
- _____

4. Overall, the information in this issue was:

Very helpful Not very helpful

Helpful Not helpful of all

Somewhat helpful

5. Please indicate your professional license type by checking the appropriate box.

MD DO PA CRNP IBCLC RD

Other, specify _____