

Breastfeeding



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Indian Health Service
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Indian Health Diabetes Best Practice: Breastfeeding

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Why is breastfeeding important?

The multiple benefits of breastfeeding have been well described*. However, the rate of initiation and duration of breastfeeding in the U.S. are well below the *Healthy People 2010* goals, even though many health organizations recommend exclusive breastfeeding for the first six months of life (U.S. DHHS, 2000; Pediatrics Workgroup on Breastfeeding, 2005).

Breastfeeding plays a particularly important role in the preventing type 2 diabetes and overweight. Consider these facts:

- Exclusive breastfeeding for the first two months of life is associated with a 40% reduction in type 2 diabetes among Pima Indians (Pettitt *et al.*, 1997).
- Longer duration of breastfeeding is associated with a decrease in overweight (Harder *et al.*, 2005; Slusser, 2005; Stuebe *et al.*, 2005; Young *et al.*, 2002). For example, one month of breastfeeding was associated with a 4% decrease in the risk of developing type 2 diabetes.
- Prolonged breastfeeding is associated with lower rates of overweight among children who were breastfed for longer durations (Arenz *et al.*, 2004; Grummer-Strawn *et al.*, 2004; Gillman *et al.*, 2001; von Kries *et al.*, 1999).
- The Phoenix Indian Medical Center (PIMC) found that the prevalence of overweight and obesity related to early childhood feeding experiences in a group of American Indian and Alaska Native children between the ages of 3 and 4 years who were enrolled in the Women, Infant, and Child (WIC) program. Children who were breastfed exclusively for the first six months of life experienced overweight and obesity at a rate of 23%, as compared with an overweight and obesity rate of 64% in children who were exclusively fed formula (Begay *et al.*, 1999).
- PIMC has also used breastfeeding support as a diabetes intervention for the past six years. During this time, PIMC has observed a 12% increase in breastfeeding at eight weeks of life. The increase in infants receiving breast milk for the first eight weeks of life translates into a 5% reduction in diabetes prevalence for this age cohort (Wilson *et al.*, 2005).

Breastfeeding offers an important opportunity for intervention because it can be done for a fairly short period of time (e.g., a minimum duration of two months), yet has life-long benefits. Breastfeeding interventions appear to be an ideal *primary* prevention intervention for type 2 diabetes and overweight. Furthermore, breastfeeding is consistent with American Indian and Alaska Native cultural practices. Many generations of American Indian and Alaska Native women breastfed their babies, and the practice continues in American Indian and Alaska Native communities to this day.

^{*}Breastfeeding has been associated with many benefits, including decreased incidence or severity of a wide range of infectious diseases, including bacterial meningitis, bacteremia, diarrhea, respiratory tract infection, necrotizing enterocolitis, otitis media, urinary tract infection, and late-onset sepsis in preterm infants. Breastfeeding has also been associated with a 21% reduction in post neonatal infant mortality rates in the U.S. (Pediatrics Workgroup on Breastfeeding, 2005).

Best practices for breastfeeding

The best practices for breastfeeding describe the best methods for:

- Promoting and supporting breastfeeding.
- Offering breastfeeding education to health care providers.
- Providing breastfeeding education to patients, their families, and the community.
- Providing early and ongoing breastfeeding expertise and support.

Table 1 summarizes the best practices for breastfeeding.

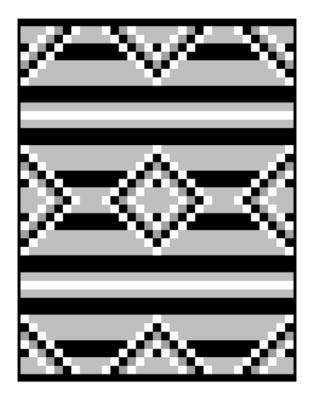


Table 1. Best practices for breastfeeding.

	Provider Recommendations	Best Practices	
1.	Promote and support breastfeeding	 Why? The benefits of breastfeeding have been well established in the literature. Therefore, programs should take a strong position to promote breastfeeding (Pediatrics Workgroup on Breastfeeding, 2005). How? Promote breastfeeding in clinical and community diabetes programs. Promote breastfeeding as a cultural norm. Provide support measures for breastfeeding. Encourage family and societal support for breastfeeding. Recognize the effect of cultural diversity on breastfeeding (e.g., attitudes and practices) (Wright et al., 1997). 	
2.	Offer breastfeeding education to health care providers	 Why? Health care providers who are trained in and support breastfeeding interventions have higher rates of breastfeeding among patients whom they have educated and encouraged (Humenick et al., 1998). How? Provide health care providers with current knowledge and skills to encourage and clinically manage breastfeeding. Survey health care providers to determine their breastfeeding knowledge and practices. Provide feedback on the survey results to raise health care providers' awareness of the benefits of breastfeeding, and to encourage them to promote and provide patient education on breastfeeding. Encourage providers to engage in informal education of and discussions about breastfeeding, such as informal conversations in common areas or hallways and seeking suggestions and answers to questions from colleagues. Provide education to providers through formal programs. For example: Hold monthly in-services. Offer staff education classes on breastfeeding support (i.e., "how to support the breastfeeding choice"). Such classes could be 4- to 8-hour classes offered once or twice each year. 	

Table 1. Best practices for breastfeeding. (continued)

	Provider Recommendations	Best Practices
2.	Offer breastfeeding education to health care providers (continued)	 Provide information to health care providers on breastfeeding-related conferences and workshops held outside the facility. Offer clinical rotations and training for WIC aides (e.g., Dietetic Internship Program at Phoenix Indian Medical Center). Conduct breastfeeding support workshops and presentations at local, tribal, regional, and national meetings. Consider offering continuing education credits at large conferences, such as the Indian Head Start Program Conference, Tribal Child Care Conference, Indian Health Service (IHS) National Nutrition Seminar, and IHS National Diabetes Conference.
3.	Provide breastfeeding education to patients, their families, and the community	Why? Breastfeeding education, which is given repeatedly during face-to-face interactions, can have a positive influence on a person's decision to breastfeed (Sikorski <i>et al.</i> , 2002). A July 2003 review by the U.S. Preventive Services Task Force found that breastfeeding education was the single most effective intervention for increasing breastfeeding initiation and short-term duration (Guise, 2003).
		How?Conduct community breastfeeding campaigns.
		 Provide education about the benefits of breastfeeding to patients and their families in community settings.
		 Conduct an inventory of education programs, lactation support providers, peer counselors, and breastfeeding support groups.
		 Collaborate with WIC programs and other programs that have a high level expertise in breastfeeding support.
		 Collaborate with Head Start and Early Head Start programs, Healthy Start initiatives, childcare centers, birthing classes, and Boys and Girls Clubs.
		 Provide information on and contact numbers for national, state, and regional breastfeeding hotlines and warmlines.
		 Provide breastfeeding education as a part of pregnancy classes.
		Maximize community outreach through an up-to-date website.

Table 1. Best practices for breastfeeding. (continued)

Provider Recommendations	Best Practices		
4. Provide early and ongoing expertise and support in breastfeeding	Why? Ongoing professional support to mothers through in-person visits or telephone contact increases the proportion of women who continue breastfeeding for up to six months (Guise et al., 2003).		
	How?		
	 Assist pregnant women and mothers with breastfeeding: 		
	 Discuss breastfeeding at the first and subsequent prenatal visits. 		
	 Use the approach of asking, "Have you thought about how to feed your baby?". 		
	 Answer the patient's questions by tailoring your responses to the patient's background, and use the opportunity to mention the benefits associated with breastfeeding. 		
	 Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants. 		
	• Help mothers initiate breastfeeding within a half-hour of birth.		
	 Encourage mothers to avoid giving newborn infants food or drink other than breast milk, unless medically indicated. 		
	 Encourage mothers to practice rooming-in (i.e., allowing mothers and infants to remain together) 24 hours a day. 		
	 Provide ongoing breastfeeding support for mothers: 		
	 Provide one-on-one counseling for breastfeeding support. This approach has been effective in increasing breastfeeding initiation and duration rates. 		
	 Develop and maintain effective communication and coordination with other health care professionals to ensure optimal breastfeeding education, support, and counseling. 		
	 Encourage childcare providers to support mothers in breastfeeding and using expressed human milk. 		
	 Advise mothers to continue their breast self-examinations on a monthly basis throughout lactation and to continue to have annual clinical breast examinations by their physicians. 		
	 Have all members of the health care system and allied partners convey consistent messages to support the "informed choice and decision" to breastfeed. 		

Table 1. Best practices for breastfeeding. (continued)

Provider Recommendations	Best Practices
4. Provide early and ongoing expertise and support in breastfeeding (continued)	 Provide staff with time to offer breastfeeding instruction, support, and problem solving. Provide "24-7" (i.e., 24-hour, 7 days a week) hotline services. Conduct follow-up appointments with patients using monthly face-to-face visits and phone calls. Contact mothers at eight weeks postpartum to offer help and information on feeding choices. Determine the possible causes of any decrease in breastfeeding initiation or duration rates. For example, has there been a change
	 in patient education flow or low attendance at breastfeeding classes? Is there limited space for patient counseling? Work collaboratively with breastfeeding groups and resources to ensure that women receive accurate and sufficient information about
	breastfeeding and can be referred appropriately. For example, work with WIC clinics, breastfeeding medical and nursing specialists, lactation educators and consultants, lay support groups, and breast pump rental stations.
	 Provide breastfeeding support in clinics, workplaces, and public areas: Provide effective breast pumps and private lactation areas for all breastfeeding mothers (including patients and staff).
	• Lease or rent hospital grade electric breast pumps rather than purchase them. For example, a breast pump can be leased from Medela for approximately \$140 per year. The local WIC program may also be able to provide breast pumps to programs.
	 Develop loss prevention programs for breast pumps. For example, work with partners, such as a Women's Auxiliary group, to obtain funding for grocery or department store gift cards, and give to women when they return the breast pumps.
	• Develop office practices that promote and support breastfeeding by using the guidelines and materials provided by the American Academy of Pediatrics Breastfeeding Promotion in Physicians' Office Practices Program (AAP, 2004).
	 Provide information on evidence-based breastfeeding guidelines and its effects on overweight and diabetes by posting laminated posters on program office and clinic walls. Initiate a nursing mother's lounge in health care centers and tribal
	offices.

Best practices for health care organizations

A health care organization that wants to promote and increase breastfeeding must be motivated and prepared for change throughout the entire organization. The organization's leadership must identify breastfeeding promotion as important work. They must also develop clear improvement goals, policies, and effective improvement strategies. This will help encourage the entire organization to make changes that will help increase breastfeeding practices and may help to prevent type 2 diabetes and overweight.

Table 2 describes the best practices for health care organizations.

Table 2. Best practices for health care organizations.

Organization Recommendations	Best Practices		
System and	Why?		
programmatic changes	A Cochrane review found that system and program changes in maternity care practices effectively increased breastfeeding initiation and duration rates (Shealy <i>et al.</i> , 2005; Fairbank <i>et al.</i> , 2000).		
	How?		
	The following activities may increase breastfeeding and reduce rates of diabetes and overweight:		
	 Establish a simple and easy-to-remember mission statement. For example, "Our organization will promote breastfeeding choice to prevent or delay diabetes and overweight". 		
	 Establish employee policies and procedures to support breastfeeding in the workplace (e.g., casinos and other major tribal employers), including breast pump stations in clean, private areas. 		
	 Develop memoranda of understanding with local breastfeeding resources and community programs, such as WIC, for referral and release of data and information processes. 		
	 Portray breastfeeding as positive and normal. 		
	 Promote policies and procedures that facilitate breastfeeding and work actively toward eliminating hospital policies and practices that discourage breastfeeding (e.g., promotion of infant formula in hospitals, infant formula discharge packs, formula discount coupons, and separation of mother and infant). 		
	 Develop a written breastfeeding policy that is routinely communicated to all health care staff. Provide training to all health care staff in the skills necessary to implement the policy. 		
	Enlist the support of the clinical director in the perinatal program.		

Table 2. Best practices for health care organizations (continued).

Organization Recommendations	Best Practices		
System and programmatic changes (continued)	 Why? Provide in-depth training in breastfeeding for all health care staff. Establish quarterly meetings between breastfeeding staff and maternal and child health staff. Determine which health care providers are comfortable with breastfeeding and support breastfeeding. Likewise, determine who is not comfortable with breastfeeding as a choice, listen to their concerns, and work to help them become comfortable with supporting breastfeeding. Develop, regularly review, and make appropriate changes based on breastfeeding initiation and duration rate reports. Ensure that patients have access to lactation experts, peer counselors, and trained maternal and child health staff. Establish perinatal registries with infant feeding choice information. Consider collecting information about infant feeding practices for every child visit less than 24 months of age. 		



Essential elements of best practice programs for breastfeeding

High quality breastfeeding programs involve implementing six essential elements in your health care organization. These elements are:

- Community resources and policies.
- Health care organization leadership.
- Patient self-management support.
- Delivery system design: Services, programs, systems, and procedures.
- Decision support: Information and training for providers.
- Clinical information systems: Collecting and tracking information.

Table 3 summarizes how these elements apply to basic, intermediate, and comprehensive breastfeeding programs.

^{*}Adapted from the Chronic Care Model, which was developed by the MacColl Institute for Healthcare Innovation at the Group Health Cooperative. For more information on the Chronic Care Model, visit their website at www.improvingchroniccare.org.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs.

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Community resources and policies			~
 Identify all potential resources in the community. Use any resources that meet quality standards and patients' needs. Form partnerships with the local WIC program. 	 Train field health personnel in breastfeeding support. Provide community education and outreach. 	 Coordinate activities among breastfeeding programs and community programs. Develop and implement a community education program on breastfeeding and diabetes. 	 Conduct an inventory of education programs and lactation support providers, peer counselors, and breastfeeding support groups. Collaborate with WIC programs. (WIC staff often have the highest level of expertise in breastfeeding support in a tribal community.) Collaborate with Head Start and Early Head Start programs, Healthy Start initiatives, childcare centers, birthing classes, and Boys and Girls Clubs. Form partnerships with national, state, and regional breastfeeding hotlines and warmlines. Develop memoranda of understanding with local breastfeeding resources and community programs for referral and release of data and information processes. Develop employee policies and procedures to support breastfeeding in the workplace, such as in casinos and other major tribal employers. Policies could include providing breast pump stations in clean, private areas.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Organization leadership			
 Promote breastfeeding in families, communities, and workplaces. Provide staff, space, computers, equipment, materials, and training for breastfeeding support services. Develop accountability measures and include in the facility's performance improvement plan. Establish a continuous quality improvement process. Define goals and objectives that support breastfeeding choice. Ensure that multidisciplinary breastfeeding support programs and staff have appropriate resources. 	- Include prevention and treatment of diabetes and overweight through breastfeeding in the organization's annual goals.	Include specific breastfeeding outcome measures in the organization's annual performance-based objectives.	 Dedicate at least one full-time position for a qualified health provider to function as the breastfeeding support provider. Meet professional standards for lactation consultation (e.g., have a certified lactation educator (CLE), develop an affiliation with a university program, and train peer support counselors). Develop employee policies and procedures to support breastfeeding in the workplace. Ensure support from leadership for national data collection on infant feeding choice and making progress towards Healthy People 2010 goals. Ensure support from leadership for collecting data on breastfeeding (e.g., 30% initiation rate of breastfeeding at the clinic, 25% duration at eight weeks, and four breastfeeding support classes offered in the prenatal clinic during the first quarter).

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Organization leadership (continued)			
			 Include breastfeeding in chief executive officer performance contracts and employee performance goals. Advocate for the IHS to establish standards of care for breastfeeding, baseline data for the Government Performance and Results Act (GPRA), and goals for breastfeeding. Advocate for the IHS Diabetes Treatment and Prevention Program, IHS National Nutrition and Dietetics Training Program, and IHS Head Start Program to commit financial resources for travel and training of staff, as well as printing and distributing educational materials. Provide people with information and support so that they can make informed infant and child feeding choices.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs for patients with diabetes. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Patient self-management support			
 Support choice to breastfeed and "informed decision" for infant feeding throughout the health system. Offer breastfeeding support information as a part of diabetes and pregnancy classes. Provide clear messages of pride in parenting, including not shaming mothers for not choosing to breastfeed. Provide dedicated staff with time to offer breastfeeding instruction, support, and problem solving (e.g., face-to-face lactation support during the pregnancy, at delivery, and post-delivery; two-day newborn well clinic; two-week newborn well clinic; and well child checks coordinated with immunizations). Provide resources to allow breastfeeding support staff to meet with and understand patient and family needs. Provide a 24-hour, 7 days a week, hotline service. 	- Provide education within the framework of an IHS-certified (or equivalent) curriculum.	 Develop and implement a culturally appropriate, comprehensive breastfeeding education program. Loan electric breast pumps to mothers who are breastfeeding. Provide patients with quick responses (i.e., within 12–24 hours) to their breastfeeding questions and concerns. 	 Provide patients with an inventory of breastfeeding programs and information on the eligibility for these programs (e.g., WIC programs). Establish a nursing mother's lounge in the clinic with a rocker-recliner, changing table, electric breast pump, and children's sitting area with books. Make routine follow-up appointments with patients. Establish and maintain a practical breastfeeding support webpage. Monitor the use of educational materials. Provide quiet, private spaces for individual counseling and group education. Consider a three-day postpartum health visit to mothers, during which breastfeeding support staff can offer support.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs for patients with diabetes. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Delivery system design: Services,	programs, systems, and procedures		
 Encourage all women to breastfeed exclusively for six months before introducing solid foods and continue to breastfeed for 12 months or as long as desired. Develop and implement self-management programs with skilled breastfeeding providers. Establish a multidisciplinary team with staff trained in breastfeeding support, including health professionals, peer counselors, and lay workers. Use education materials (e.g., breastfeeding posters, pamphlets, booklets, and videos) specific for American Indians and Alaska Natives to support breastfeeding choice. 	 Use a case management approach. Provide written communication about breastfeeding messages and policies among case managers, primary care providers, and specialists. Implement a multidisciplinary team approach that includes staff trained in breastfeeding support, peer counselors, trained maternal and child health staff, and access to a lactation support specialist. Establish referral mechanisms to a professional lactation support specialist. Form partnerships with public health nursing. 	 Use registered lactation consultants to help mothers breastfeed their babies in challenging situations. Obtain funding for staff positions dedicated to breastfeeding promotion. Hire or contract with a nutritionist certified in diabetes education, lactation support specialist, and registered lactation consultant. 	 Develop an easy-to-remember mission statement, such as "Our clinic promotes breastfeeding choice as a tool for preventing or delaying diabetes and overweight". Conduct regular breastfeeding meetings with maternal and child health staff. Find out who in your health center is comfortable with breastfeeding, who supports breastfeeding, and who are not breastfeeding advocates. Listen and work to "win over" the staff who are not breastfeeding advocates. Consistently provide mothers, families, and staff with factual information. If your health center does not use an appointment system, consider using person-to-person contact in the hospital, through home visits (with lactation consultants), or over the telephone.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs for patients with diabetes. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Delivery system design: Services,	programs, systems, and procedures (continued)	 Have certified lactation educators contact mothers over the telephone at eight weeks postpartum to offer help and provide information on feeding choices. Stick to the easy-to-remember, factual messages. Repeat key messages. Inform staff when the message changes. Call the breast by its name: "breast". Don't use sexual innuendos or provocative messages. Respect the cultural norms and boundaries of your clients' communities. Give people the opportunity to ask questions related to breastfeeding in a casual, non-threatening environment.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs for patients with diabetes. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Decision support: Information and	training for providers		
 Use shared decision-making approaches and empowerment models. Use evidence-based guidelines. Train providers in behavioral change strategies, such as motivational interviewing. Provide factual information and psychosocial support. Involve health staff, including perinatal staff, nurses, physicians, community health representatives, dietitians, Head Start, Early Head Start, and WIC program staff. Provide basic training on breastfeeding promotion. Provide training so that at least one team member is certified in breastfeeding support or ensure that the program has access to an expert consultant. 	 Use detailed, evidence-based breastfeeding and diabetes care guidelines. Provide staff evidence-based education (e.g., in-services) on breastfeeding support. 	- Train local providers in breastfeeding.	 Share evidence-based guidelines and research on feeding choice and its effects on overweight and diabetes. Consider displaying posters with this information in the clinic. Have breastfeeding staff educate providers formally through monthly in-services and offer continuing education credits. Recommend conferences and workshops outside the facility to providers. Offer a staff education class on breastfeeding support. Offer continuing education credits for classes on "how to support feeding choice". Consider offering a 4–8 hour class offered yearly or twice yearly. Provide breastfeeding support workshops and presentations at local, tribal, regional, and national meetings, including the Indian Head Start Program Conference, Tribal Child Care Conference, IHS National Nutrition Seminar, and IHS National Diabetes Conference.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs for patients with diabetes. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples
Decision support: Information and	training for providers (continued)		
			 Offer clinical rotations and training for WIC aides. Work toward being recognized in the IHS Dietetic Internship Program. For example, the Phoenix Indian Medical Center breastfeeding support group offers an IHS dietetic internship program to an American Indian and Alaska Native graduate in dietetics, offering a hands-on practicum in dietetics, including breastfeeding support. Educate providers informally through hallway conversations and answering questions from colleagues. Inform patients about breastfeeding guidelines through bedside posters and through inperson contact with nurses, lactation consultants, obstetricians, pediatricians, and social workers. Offer clear, non-judgmental, non-stigmatizing messages in verbal communication, videos, and print media.

Table 3. Essential elements of basic, intermediate, and comprehensive best practice breastfeeding programs. (continued)

Basic Breastfeeding Programs	Intermediate Breastfeeding Programs Basic program <i>plus</i> :	Comprehensive Breastfeeding Programs Basic and intermediate programs <i>plus</i> :	Examples			
Clinical information systems: Collecting and tracking information						
 Create and maintain a diabetes registry that generates reminders. Include breastfeeding in the diabetes audit. Use a system that allows for chart reviews and continuous quality improvement. Use the Resource and Patient Management System (RPMS) Patient Care Component (PCC) form to communicate patient outcomes among providers. Use a data tracking and analysis program. Participate in the IHS Special Diabetes Program for Indians annual questionnaire. Report outcomes. Have data and information systems specialists assemble, edit, and analyze the breastfeeding support program. Facilitate communication among breastfeeding support staff, providers, and other community programs or resources through verbal communication and the patient medical record. Document information in the patient medical record. 	- Use individual program data to prepare reports, and share reports with partners at least annually.	 Form partnerships with WIC and other programs to analyze data on breastfeeding. Enhance surveillance through linkages with tribal epidemiology centers. Focus outcomes on clinical and behavioral outcomes. Publish breastfeeding program outcomes. Share findings with patients, providers, and tribal communities in reports, publications, and oral presentations. Evaluate the breastfeeding program to determine program successes and challenges and to improve the program. 	 Develop perinatal registries and infant feeding choice information in Excel. Analyze and present data at staff meetings and in Special Diabetes Program for Indians grant reports. Collect information about infant feeding practices at every visit for children less than 24 months of age on the RPMS PCC form. Develop a patient survey tool. Base goal planning on the number of monthly contacts. Routinely review breastfeeding initiation rates and determine possible causes of declining rates and problem solve to increase rates. Allow access and use of the patient medical record by the breastfeeding support staff. Have a data and information systems specialist evaluate the breastfeeding support program. Use the evaluation to raise awareness and encourage implementing strategies to increase breastfeeding initiation and duration. 			

Evaluating your breastfeeding program

Evaluation is important because it helps you see what is working and what is not working in your breastfeeding program. It will show you if adjustments or changes need to be made in order to improve your breastfeeding program. Evaluation also provides you with information that you can use to share your successes with patients, providers, tribal leaders, administrators, the community, funders, and other stakeholders.

Consider the following in your evaluation plan:

- Outcome measures including breastfeeding initiation rates (e.g., 30% initiation rate of breastfeeding at our clinic) and breastfeeding duration rates (e.g., 25% duration at eight weeks).
- Process measures, such as the number of breastfeeding support classes offered in the prenatal clinic, patient satisfaction, and service utilization.
- The hallmark of a comprehensive breastfeeding program is the use of outcome measures and at least one dedicated breastfeeding support specialist.

Sustaining your breastfeeding program

Often, for diabetes goals to be reached, programs must be in place for more than a few years. Here are some helpful tips for sustaining the program:

- Determine if the health system is committed to building a permanent breastfeeding support program.
- Offer breastfeeding support as a part of routine perinatal care.
- Partner with others, such as WIC programs.
- Use the resources available to you *now*. Start small and build your program slowly and steadily. Figure out ways to emphasize the positive.
- Focus on traditional American Indian and Alaska Native messages, culture, and history. For
 example, choosing to breastfeed honors the traditions of American Indian and Alaska Native
 families. The practice of breastfeeding respects our heritage and culture and strengthens our
 children, our communities, and our future.
- Use messages of hope and affirmation. For example, "Breastfeeding is the gift that mothers give their babies" and "It takes a strong man to support breastfeeding".
- Use nationally recognized guidelines, e.g., Office of Women's Health Blueprint for Action on Breastfeeding.
- Celebrate success!
- Respect the patient. Demonstrate an attitude of acceptance and encouragement from health care staff, employers, family, and peers.
- Offer breastfeeding education and support while in the hospital after delivery and having a resource afterwards accessible by phone, clinic, or home visits.

- Set realistic program goals: to increase the number of children who are breastfed and to increase the mean duration of breastfeeding.
- Utilize the 24-hour help hotline as a major intervention. Extensively market and distribute the hotline number.

Contacting others for help

Contacting other people involved in breastfeeding efforts is important because they can help you get started. Your peers at other health care organizations can share their expertise, materials, and ideas, and can also tell you what has worked for them and what has not. This can help you avoid reinventing the wheel. Here are some tips on how to connect with others:

- Ask your Area Diabetes Consultant for the names of people who may be able to help you.
- Contact the IHS Division of Diabetes Treatment and Prevention for ideas. They may be able to point you in the right direction.
- Ask the IHS Integrated Diabetes Education Recognition Program for suggested contacts.
 They have names and contact information for people who work with IHS-accredited diabetes education programs.
- Review resources from the National Diabetes Education Program (NDEP). NDEP offers
 materials that will help your program get started, including information specifically for
 American Indians and Alaska Natives. You can access these resources at the website:
 www.ndep.nih.gov

Real-world best practice programs

The following are examples of the numerous breastfeeding support programs and efforts across American Indian and Alaska Native communities:

Apache Diabetes Wellness Center

(An intermediate best practice program)

Sharon Jimenez, RN, MSN

(928) 521-4933

White River, Arizona 85941

This community-based breastfeeding support program offers breastfeeding support services through a registered nurse, certified breastfeeding educator, and peer counselors. The program receives referrals from the WIC Program, public health nurses, and the prenatal clinic. Staff provide breastfeeding support to mothers and mothers-to-be in clinics, through the WIC Program, in hospitals, during home visits, through monthly classes, and over the phone. Staff visit with mothers-to-be two or three times before birth, and then visit the new family multiple times during the baby's first week. The program also provides educational materials and breastfeeding pumps.

Chickasaw Nation Diabetes Program

(A comprehensive best practice program)

Shon (Shondra) McCage, MPH, CHES, Certified Breastfeeding Educator

- **(580)** 421-4532
- → Shondra.McCage@chickasaw.net

This program offers comprehensive breastfeeding support services through a network of health services, including the Chickasaw Nation Diabetes Program, Chickasaw Nation WIC Program, Chickasaw Nation Hospital, satellite clinics, and other community programs.

A certified breastfeeding educator, a certified lactation consultant, and five breastfeeding peer counselors are available to provide intensive breastfeeding support by phone or through home visits. All Chickasaw Nation WIC staff, including paraprofessionals, receptionists, nutritionists, and administrators, are trained in basic breastfeeding support and education.

The program also offers breastfeeding pumps to tribal members and employees; provides breastfeeding support baskets with educational materials; screens for prediabetes, gestational diabetes, and type 2 diabetes; offers a comprehensive gestational diabetes clinic; and invites a certified lactation specialist to present to health staff (with continuing medical education credits).

The program estimates that more than 60% of women initiate breastfeeding in the Chickasaw Nation.

Eastern Band of Cherokee Indians Head Start and Early Head Start Programs

(An intermediate best practice program)

Linda Chiltoskie, Pregnancy Program Coordinator and Doula

- (828) 497-9008, extension 2207
- findchil@nc-cherokee.com
- PO Box 1178, Aquoni Road Cherokee, North Carolina 28719

This program offers a nine-month intensive pregnancy and postpartum support program with home visits and one-on-one support to mothers and mothers-to-be. The program also coordinates breastfeeding support services with other community programs (e.g., Supplemental Food Program for WIC and tribal health care services).

The program, as well as the primary care providers in the community, are very supportive of breastfeeding by presenting breastfeeding choice, encouraging women to pump and store breast milk, providing curriculum-based education (through the *Partners for Health Babies* curriculum), and visiting mothers in their homes to provide early and ongoing breastfeeding expertise and support. The program also uses innovative techniques to support breastfeeding in the community, such as inviting a certified lactation specialist to present to program participants and inviting successful "graduates" of the program to share their breastfeeding experiences with program participants.

Three years of data demonstrate that 90% of the program's participants breastfeed their babies for six weeks or longer.

Phoenix Indian Medical Center Diabetes Center of Excellence Breastfeeding Support Program (A comprehensive best practice program)

Suzan Murphy, RD, MPH, CDE, IBCLC

(602) 263-1200, extension 1044

suzan.murphy@pimc.ihs.gov

Charlton Wilson, MD

(602) 263-1587

charlton.wilson@pimc.ihs.gov

Breastfeeding Support Program

(877) 868-9473 (Toll-free breastfeeding hotline)

PIMC Breastfeeding Support Program
4212 North 16th Street
Phoenix, Arizona 85016

Since the program's inception in October 1999, program staff have provided breastfeeding support to more than 5,200 families. Program staff provide breastfeeding classes in clinic waiting rooms and at child birth classes. They also give breastfeeding support presentations at powwows, health fairs, and conferences. The program offers a 24/7 breastfeeding support hotline to families, provides breastfeeding pumps to mothers, and distributes culturally specific education materials.

Southcentral Foundation

Brenda Cook, RN, CMC, Lactation Educator and Family Medicine Case Manager

bcook@scf.cc

 ⊠ 8010 Chipper Tree Circle Anchorage, Alaska 99507

This program provides breastfeeding support services through certified lactation consultants, registered nurses, public health nurses, WIC staff, registered dietitians, and other health providers. Program staff provide expectant families with breastfeeding information before birth and postpartum through home and clinic visits. Families can also page program staff during work hours to obtain immediate assistance. In August 2005, the program sponsored the Infant Health Fair during World Breastfeeding Week.

Warm Springs Health and Wellness Center

(A basic to intermediate best practice program)

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This program provides expectant families with breastfeeding information and support both before birth and postpartum. Program staff visit new mothers in the hospital and at home, and offer support over the phone. The program also distributes education materials, offers prenatal classes, and sponsors annual World Breastfeeding Week celebrations.

Helpful websites

American Academy of Pediatrics

- www.aap.org
- www.aap.org/healthtopics/breastfeeding.cfm
- http://aappolicy.aappublications.org/cgi/content/full/pediatrics;115/2/496
- http://aappolicy.aappublications.org/cgi/reprint/pediatrics;100/6/1035.pdf

American College of Nurse-Midwives: Got Mom...

This website was created by the American College of Nurse-Midwives to provide breastfeeding information and resources for mothers and families.

• www.gotmom.org

The American College of Obstetricians and Gynecologists

• www.acog.org

American Dietetic Association

The American Dietetic Association maintains the position that exclusive breastfeeding provides optimal nutrition and health protection for the first six months of life, and breastfeeding with complementary foods for at least 12 months is the ideal feeding pattern for infants. (This position statement was published in the *Journal of the American Dietetic Association* 2005;105:810–18.)

• www.eatright.org

Baby Friendly USA

www.babyfriendlyusa.org

Breastfeeding Task Force of Greater Los Angeles

www.breastfeedingtaskforla.org

Centers for Disease Control and Prevention: Guide to Breastfeeding Interventions

www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf

Health and Human Services: Blueprint for Action on Breastfeeding

www.womenshealth.gov/Breastfeeding/bluprntbk2.pdf

Inland Empire Breastfeeding Coalition: Model Hospital Policy Recommendations

http://inlandempirebreastfeedingcoalition.org/model_policies.htm

Office of Women's Health

This website was recommended as one of the top websites in a 2005 article in *Journal of Human Lactation*. It includes PowerPoint presentations and media outreach campaign resources.

www.womenshealth.gov/breastfeeding

United States Breastfeeding Committee

The United States Breastfeeding Committee's website provides a strategic plan for breastfeeding in the U.S., as well as many other publications.

www.usbreastfeeding.org/Publications.html

References

American Academy of Pediatrics. American Academy of Pediatrics (AAP) policy statement: Breastfeeding and the use of human milk. *Pediatrics*. 2005;115(2):496–506.

American Academy of Pediatrics. *Breastfeeding Promotion in Physicians' Office Practices Program*. Elk Grove Village, IL: American Academy of Pediatrics, 2004.

Arenz S, Ruckerl R, Koletzko B, and von Kries R. Breast-feeding and childhood obesity—a systematic review. *International Journal of Obesity and Related Metabolic Disorders*. 2004;28(10):1247–56.

Begay T, Murphy S, Hosna D, Sell K, and Wilson C. Infants breastfed to at least six months of age have less overweight/obesity at 3–4 years of age than infants who received formula by six months of age: Implications for the Diabetes Prevention Program. Presentation at the IHS Diabetes National Conference. Albuquerque, New Mexico, 1999.

Bergmann K, Bergmann R, von Kries R, Bohm O, Richter R, Dudenhausen J, and Wahn U. Early determinants of childhood overweight and adiposity in a birth cohort study: Role of breastfeeding. *International Journal of Obesity*. 2003;27:163–72.

Dewey KG, Heinig MG, and Nommsen-Rivers LA. Maternal weight-loss patterns during prolonged lactation. *American Journal of Clinical Nutrition*. 1993;58:162–66.

Fairbank L, O'Meara S, Renfrew MJ, Woolridge M, Snowden AJ, and Lister-Sharp D. A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technology Assessment*. 2000;4(25):1–171.

Gillman M, Rifas-Shiman SL, Camargo CA Jr, Berkey CS, Frazier AL, Rockett HR, Field AE, and Colditz GA. Risk of overweight among adolescents who were breastfed as infants. *Journal of the American Medical Association*. 2001; 285(19):2461–67.

Grummer-Strawn LM and Mei Z. Does breastfeeding protect against pediatric overweight? Analysis of longitudinal data from the Centers for Disease Control and Prevention Pediatric Nutrition Surveillance System. *Pediatrics*. 2004;113(2):e81–86.

Guise JM, Palda V, Westhoff C, Chan BK, Helfand M, and Lieu TA; U.S. Preventive Services Task Force. The effectiveness of primary care-based interventions to promote breastfeeding: Systematic evidence review and meta-analysis for the U.S. Preventive Services Task Force. *Annals of Family Medicine*. 2003;1(2):70–78.

Harder T, Bergmann R, Kallischnigg G, and Plagemann A. Duration of breastfeeding and risk of overweight: A meta-analysis. *American Journal of Epidemiology*. 2005;162(5):397–403.

Humenick SS, Hill PD, and Spiegelberg PL. Breastfeeding and health professional encouragement. *Journal of Human Lactation*. 1998;14(4):305–10.

Li R, Darling N, Maurice E, Barker L, and Grummer-Strawn L. Breastfeeding rates in the United States by characteristics of the child, mother, or family: The 2002 National Immunization Survey. *Pediatrics*. 2005;115(1):e31–37.

Pediatrics Workgroup on Breastfeeding. Breastfeeding and the use of human milk. *Pediatrics*. 2005;115(2):496–506.

Pettitt D, Forman M, Hanson R, Knowler W, and Bennett P. Breastfeeding and incidence of non-insulin-dependent diabetes mellitus in Pima Indians. *Lancet*. 1997;350:166–68.

Shealy KR, Li R, Benton-Davis S, and Grummer-Strawn LM. *The CDC Guide to Breastfeeding Interventions*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005. (Available online at:

www.cdc.gov/breastfeeding/pdf/breastfeeding_interventions.pdf. Accessed January 2006.)

Sikorski J, Renfrew MJ, Pindoria S, and Wade A. Support for breastfeeding mothers. *Cochrane Database of Systematic Reviews*. 2002;(1):CD001141. Review.

Slusser W. Longer duration of breastfeeding decreases the risk of overweight. *AAP Grand Rounds*. 2005;14:67–68.

Speiser PW, Rudolf MC, Anhalt H, Camacho-Hubner C, Chiarelli F, Eliakim A, Freemark M, Gruters A, Hershkovitz E, Iughetti L, Krude H, Latzer Y, Lustig RH, Pescovitz OH, Pinhas-Hamiel O, Rogol AD, Shalitin S, Sultan C, Stein D, Vardi P, Werther GA, Zadik Z, Zuckerman-Levin N, and Hochberg Z; Obesity Consensus Working Group. Childhood obesity. *Journal of Clinical Endocrinology and Metabolism.* 2005;90(3):1–29.

Stettler N, Zemel BS, Kumanyika S, and Stallings VA. Infant weight gain and childhood overweight status in a multicenter, cohort study. *Pediatrics*. 2002;109(2):194–99.

Stuebe A, Rich-Edwards J, Willett W, Manson J, and Michels K. Duration of lactation and incidence of type 2 diabetes. *Journal of the American Medical Association*. 2005;294(20):2601–10.

Taveras E, Ruowei L, Grummer-Strawn L, Richardson M, Marshall R, Rego V, Miroshnik I, and Lieu T. Opinions and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics*. 2004;113(4):e283–90.

Taveras E, Scanlon K, Birch L, Rifas-Shiman S, Rich-Edwards J, and Gillman M. Association of breastfeeding with maternal control of infant feeding at age 1 year. *Pediatrics*. 2004;114(5):e577–83.

Toschke A, Vignerova J, Lhotska L, Osancova K, Koletzko B, and von Kries R. Overweight and obesity in 6- to 14-year-old Czech children in 1991: Protective effect of breastfeeding. *Journal of Pediatrics*. 2002;141(6):764–69.

von Kries R, Koletzko B, Sauerwald T, von Mutius E, Barnert D, Brunert V, and von Voss H. Breastfeeding and obesity: Cross sectional study. *British Medical Journal*. 1999;319(7203):147–50.

Young TK, Martens PJ, Taback SP, Sellers EA, Dean HJ, Cheang M, and Flett B. Type 2 diabetes mellitus in children: Prenatal and early infancy risk factors among Native Canadians. *Archives of Pediatric and Adolescent Medicine*. 2002;156(7):651–55.

U.S. Department of Health and Human Services. *HHS Blueprint for Action on Breastfeeding*. Washington, DC: U.S. Department of Health and Human Services, Office of Women's Health, 2000.

U.S. Department of Health and Human Services. *Healthy People 2010: Conference Edition—Volumes I and II.* Washington, DC: U.S. Department of Health and Human Services, Public Health Service, Office of the Assistant Secretary for Health, 2000. p. 47–48.

Weimer J and U.S. Breastfeeding Committee. The economic benefits of breastfeeding: A review and analysis [issue paper]. Raleigh, NC: U.S. Breastfeeding Committee, 2002.

Wilson C, *et al.* Breastfeeding support to reduce the risk of diabetes. Presentation at the IHS Combined Councils National Meeting. San Diego, California, 2005.

Wright A, Naylor A, Wester R, Bauer M, and Sutcliffe E. Using cultural knowledge in health promotion: Breastfeeding among the Navajo. *Health Education and Behavior*. 1997;24(5):625–39.