

# Breastfeeding in the Community: Addressing Disparities Through Policy, Systems, and Environmental Changes Interventions

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access to care, breastfeeding, breastfeeding barriers, breastfeeding support, postpartum care, social ecological model

## Background

Leading health agencies in the United States recognize breastfeeding as a public health priority (American Academy of Pediatrics, 2012; American Public Health Association, 2013; Centers for Disease Control and Prevention, 2013; U.S. Department of Health and Human Services, 2011). Through Healthy People 2020, U.S. national objectives have been set to increase the proportion of infants who are breastfed (U.S. Department of Health and Human Services, 2012). There has been a steady upward trend in the percentage of breastfed infants. The latest National Immunization Survey data from infants born in 2014 show that most of the U.S. national breastfeeding goals have been met when data for all survey participants was aggregated (Centers for Disease Control and Prevention, 2017).

Unfortunately, this achievement is not equitably shared across all subsets of the population. Non-Hispanic black (black) infants born in 2014 have not met any of the U.S. national breastfeeding goals, while non-Hispanic white (white) infants met or exceeded all of them (Centers for Disease Control and Prevention, 2017). On average, there is a 17 percentage point gap in breastfeeding initiation between black and white infants born between 2009 and 2014 (Centers for Disease Control and Prevention, 2017). Furthermore, a recent study revealed a widening black-white gap in breastfeeding rates at 6 and 12 months (Anstey et al., 2017). The percentage difference in rates for exclusive breastfeeding through 6 months between black and white infants increased from 7.8 percentage points for children born from 2003 to 2006 to 8.5 percentage points for children born from 2010 to 2013 (Anstey et al., 2017). During the same period, the 12-month breastfeeding duration rates difference gap increased from 9.7 to 13.7 percentage points (Anstey et al., 2017).

In an effort to address these disparities through community-driven solutions, in 2014, the Centers for Disease

Control and Prevention (CDC), Division of Nutrition, Physical Activity and Obesity, engaged in a cooperative agreement with the National Association of County and City Health Officials (NACCHO) to implement the Reducing Disparities in Breastfeeding Through Peer and Professional Support (Breastfeeding) Project. The purpose of the project was to increase community-level implementation of evidence-based and innovative breastfeeding programs, practices, and services in predominantly African American communities.

Between January 2015 and June 2016, NACCHO awarded \$2.9 million to fund 72 demonstration projects by 69 community agencies, with overarching requirements to (a) provide direct peer or professional lactation support services and (b) develop and maintain public health partnerships to build community support for breastfeeding. Grantees had autonomy in designing interventions and identifying the key partnerships to best serve their communities. Most of the grantees went further and worked to identify and remove structural breastfeeding barriers while building access to sustainable, multilevel, culturally attuned lactation support services within communities. On the basis of key lessons learned from this project, in this report we share practice-oriented strategies for agencies seeking to implement community-level breastfeeding interventions through a public health policy, systems, and environmental (PSE) change approach.

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**Table 1.** Definition and Examples of Policy, Systems, and Environmental Change With Breastfeeding-Related Examples.

Type of Change	Definition <sup>a</sup>	Breastfeeding-Related Examples
Policy	Interventions that create or amend guidelines, laws, ordinances, resolutions, mandates, regulations, or rules at the organizational or governmental level	Memorandum of understanding or agreement between hospital and WIC clinic to ensure continuity of care Employee breastfeeding support policy U.S. federal (paid) parental leave policy
Systems	Interventions that change the rules or procedures that impact elements of an organization, institution, or system	Implementation of text messaging system program, including protocols and scripts, to document and categorize staff and clients communication Updates to electronic medical records to capture mandated breastfeeding promotion and education encounters Integration of breastfeeding support into other services, such as provision of lactation support during existing home visitations
Environmental	Interventions that change the physical, social and economic factors that influence people's practices and behaviors	Creation of supportive environments, such as baby-friendly hospitals or breastfeeding-friendly local health departments, childcare centers, U.S. federally qualified health care centers, etc.

Note. WIC = Special Supplement Nutrition program for Women, Infants, and Children.

<sup>a</sup>Definitions from Food Trust (2012).

## Breastfeeding Support and the PSE Change Approach

Factors known to influence maternal breastfeeding behavior include lack of breastfeeding knowledge, poor maternal self-efficacy or concerns about supply, unsupportive cultural and social norms, limited access to high-quality lactation support, and nonsupportive workplace and childcare environments (Dunn, Kalich, Fedrizzi, & Phillips, 2015; Jones, Power, Queenan, & Schulkin, 2015; U.S. Department of Health and Human Services, 2011). Furthermore, there are structural barriers to breastfeeding that exist largely outside of the mothers' sphere of power (Lutter & Morrow, 2013). Black and low-income mothers are disproportionately affected by these unjust barriers, (e.g., unsupportive policies and systems), which affect their ability to breastfeed (Jones et al., 2015). Black women are more likely to return to work earlier (DeVane-Johnson, Woods-Giscombé, Thoyre, Fogel, & Williams, 2017; Johnson, Kirk, Rosenblum, & Muzik, 2015; Spencer & Grassley, 2013), work in environments not conducive to supporting breastfeeding mothers (Johnson et al., 2015), experience inadequate breastfeeding support from health care providers (DeVane-Johnson et al., 2017; Johnson, Kirk, Rooks, & Muzik, 2016; Spencer & Grassley, 2013; Wheeler & Bryant, 2017), and deliver at birthing facilities that do not implement evidence-based maternity care practice that support breastfeeding (Anstey et al., 2017).

Local health departments and community-based organizations are uniquely positioned to lead breastfeeding promotion and support efforts in the community. These agencies must strive to provide breastfeeding services that are consistent, frequent, predictable, and not reactively where women are expected to initiate contact (Renfrew, McCormick, Wade,

Quinn, & Dowswell, 2012). Moreover, interventions to increase black breastfeeding rates and ameliorate disparities must be multilevel, touching on the many systems and social structures that shape maternal capacity to breastfeed (Chapman and Perez-Escamilla, 2012; Johnson et al., 2015). Traditional public health programs, or downstream implementations, that focus solely on individual behavior change (e.g., increasing maternal knowledge and self-efficacy) do not achieve long-term systemic influences on health (Crosby, Salazar, & DiClemente, 2013; Frieden, 2010).

The PSE change approach to public health interventions uses the socioecological model to identify systems-level factors that affect individual and community health (Comprehensive Cancer Control National Partnership, 2015; Honeycutt et al., 2015). Implementing PSE changes provides an opportunity to create sustainable organizational and community shifts and to enable long-term improvements in population health (Table 1). The PSE change approach seeks to address upstream structural or systemic barriers that lead to poor health outcomes and inequities (Honeycutt et al., 2015). PSE shifts help deconstruct barriers and build environments where the healthy choice (e.g., breastfeeding) can be the easy default option (Comprehensive Cancer Control National Partnership, 2015; Cook County Public Health Department, n.d.; Frieden, 2010; National Association of County and City Health Officials, 2017). The PSE change approach focuses on systemic solutions to community issues rather than individual behavior (Table 2). It is an upstream implementation approach, which are often proactive and sustainable beyond the funding period.

Originating from CDC and Institute of Medicine (2003) efforts, the PSE change approach is widely used in community health programming (Comprehensive Cancer Control

**Table 2.** Program Implementation Versus PSE Change Implementation.

Program Characteristics	PSE Change Characteristics
Downstream solution (reactive)	Upstream solution (proactive)
Additive: results in short-term behavior change	Foundational: produces long-term behavior change over time
Individual-level impact	Community/population level impact
Often nonsustaining	Can sustain beyond funding

Source: Adapted from Food Trust (2012).

Note. PSE = policy, systems, and environmental.

National Partnership, 2015). Within the breastfeeding support context, there are also well-known programs that implemented the PSE change approach. For example, the Baby-Friendly Hospital Initiative (World Health Organization & UNICEF, 2009) is an effective PSE change intervention that sets requirements for hospitals and birth centers to adopt a comprehensive set of policies and systems on the basis of evidence-based maternity care practices to improve the environment where breastfeeding initiation takes place (Baby-Friendly USA, 2012; Lutter & Morrow, 2013; Pérez-Escamilla, Curry, Minhas, Taylor, & Bradley, 2012; Spaeth, Zemp, Merten, & Dratva, 2018).

For community-level breastfeeding programs, the use of the PSE change approach seeks to change the context to enable breastfeeding at recommended levels to be the default, easy option for families. Changing the community context includes increasing access to breastfeeding care by establishing supportive policies, systems, and environments within the community (Pérez-Escamilla et al., 2012). NACCHO grantees implemented several PSE changes, including the development of culturally tailored curricula and community resource guides, implementation of social marketing campaigns to promote normalization of breastfeeding, establishment of referral systems to institutionalize care transitions for mother-infant dyads, and use of technology (e.g., social media interaction groups, online portals, semiautomated texting programs, and telehealth applications).

## Recommendations

Twenty-seven grantees reported inclusion of PSE change strategies in their projects. However, qualitative analysis of final reports and call notes from quarterly meetings revealed that additional grantees implemented or were on the pathway to creating PSE shifts through their project. This discrepancy in reporting indicates a gap in public health breastfeeding knowledge and the need for training and technical assistance on the use of the PSE change framework for agencies implementing community-level breastfeeding programs.

NACCHO identified four key drivers for the PSE change approach implementation. These critical facilitators were

(a) building a community-specific understanding of breastfeeding barriers, (b) assessing organizational opportunities and capacities to improve breastfeeding support services, (c) leveraging internal resources (e.g., grant funds, staff, and systems), and (d) leveraging external partner resources (e.g., shared space, community connections, client access) to effect change in the policies, systems, and environments that serve families and communities. On the basis of lessons learned from grantees and these identified driving forces, NACCHO recommends the following for local agencies aiming to implement community-level breastfeeding support programs.

### Assess Community-Specific Needs and Breastfeeding Barriers

Although researchers have identified a set of common structural barriers to breastfeeding that disproportionately affect low-income mothers of color, the specific PSE changes necessary to sustainably support breastfeeding at the community level depend on the unique assets and needs of the servicing community (McKenzie, Neiger, & Thackeray, 2013). Forty-one grantees conducted a pre-implementation community needs assessment or environmental scan (see Table 3 for examples). Some assessments were an informal polling of community mothers, and others were formalized evaluations, typically embedded in a local health department, health care system, or health coalition's existing community health assessment plan.

A key lesson learned during the project was that service availability is not synonymous with service accessibility. Some factors (e.g., timing and location of services, transportation, childcare, and cultural appropriateness of educational materials and providers) can make existing lactation support services largely inaccessible to women in the community.

Grantees who were empowered with this knowledge from a community needs assessment were able to modify their implementation to better support families by addressing identified needs. One of the most poignant lessons learned by all grantees was eloquently stated in a grantee's final report: "If we are truly supporting moms, we must listen to their needs, meet their expectations and remove barriers to their participation."

### Identify Organizational Levers for Change

Organizations seeking to implement community-level breastfeeding support interventions should conduct a comprehensive analysis of internal operations to determine the organizational limitations to continuously support breastfeeding, by making it easier for mothers to sustain breastfeeding and identify potential organizational contributions to community breastfeeding barriers. The grantees presented in Table 4 conducted self-assessments and identified strategic

**Table 3.** Community Needs Assessment.

Organization	Community Needs Overview	Needs-Informed Programming
Abilities Network, Inc., Towson, MD	Abilities conducted a community assessment of breastfeeding support services. Results showed that there were no breastfeeding support groups available to mothers living in the area of highest need within Baltimore County and that professional and peer support was only available to WIC-eligible clients. In addition, there was no established breastfeeding network of support for families, or service providers within the county.	This assessment empowered local health system partners to engage in this issue, and through a strategic plan, they were able to develop and follow up on actionable items and ensure the sustainability of new efforts. As a result, they filled the service gaps by training home visiting staff to provide community and home-based support for breastfeeding mothers in the servicing area.
Alameda County Public Health Department, WIC program, Oakland, CA	Informed by the health department's community assessment planning and evaluation, they partnered with community agencies to host a "talk and tea" community gathering. The event's planners sought to understand where mothers and families currently go for breastfeeding support, and gather ideas to recruit new mothers. In addition, they conducted three group interviews to inform curricular development.	Alameda created a comprehensive engagement plan. They trained 12 community members in breastfeeding support and group facilitation and developed a breastfeeding curriculum for the Black Infant Health program, on the basis of feedback from community mothers. Additionally, a team of three outreach workers provided flyers and promoted their work to 43 community organizations, including clinics, local providers, parenting groups, libraries, shelters, and apartment communities.
Barren River District Health Department, WIC program, Bowling Green, KY	Barren River WIC conducted telephone and in-person interviews with present and past breastfeeding peer counselor program participants and other mothers in the community on the best recruitment strategies for rural women. In addition, they conducted a needs assessment of breastfeeding education and support at local worksites.	Informed by the results of surveys and interviews, Barren River created new breastfeeding peer counselor promotional materials. The brochures outlined breastfeeding benefits and featured pictures and biographies of peer counselors available to provide support. The worksite assessment was completed by 115 organizations during the worksite summit. All attendees received breastfeeding education and resources for worksites.
Kent County Department of Health, Grand Rapids, MI	Kent County conducted a gap analysis of breastfeeding support to inform where and how training and support efforts should be directed. They surveyed peer and professional staff members working at local hospitals, obstetrics clinics, home visiting programs, and community organizations that support breastfeeding. They also held a focus group with African American women from the community.	As a result of the gap analysis, Kent County provided a culturally attuned training, "Breastfeeding From an African American Perspective," to health care staff and developed a comprehensive resource guide. They recruited and trained five African American mothers from the community to become peer counselors to support other breastfeeding mothers.
St. John Providence Health System, Southfield, MI	In partnership with the Oakland County Breastfeeding Coalition, St. John conducted a phone survey with former clients to understand the challenges in seeking and accessing breastfeeding services.	On the basis of responses, the coalition added incentives including gas cards, diapers, homework club for older siblings, and meals for the families in the support group. As a result, support group attendance increased.
St. Louis Breastfeeding Coalition, Ferguson, MI	St. Louis Breastfeeding Coalition conducted a review and comparison of different available peer support models tailored to African Americans. The review identified the most appropriate group model for the Ferguson community.	With community input, buy-in, and training of community mothers as breastfeeding champions, they created and implemented their own culturally attuned breastfeeding support model, I am Breastfeeding. They provided professional "support on the go" by co-locating breastfeeding support services with other well-attended programs in the community, including during home visiting and at the local library.
The Center for Health Equity (CHE), Gadsden, FL	CHE conducted a community-wide survey with more than 200 participants to gain insights about the community's awareness, beliefs, and practice of breastfeeding. The survey was a collaborative effort among partners, including Florida State University, Head Start, and Gadsden Healthy Families.	Survey results were presented to county maternal child health agencies and informed education materials. They presented the survey results to county maternal child health agencies. On the basis of the identified needs, the CHE incorporated breastfeeding support into its home visiting program, and updated forms to include mandatory breastfeeding assessment questions. In addition, they developed a workplace support policy and assisted libraries and local businesses in becoming breastfeeding-friendly.
Wisconsin Women's Health Foundation (WWHF), Madison, WI	WWHF, in collaboration with a faith-based community partner, conducted a community needs assessment with minority community members, maternal health clinicians, parish nurses, and breastfeeding advocates. The goal was to identify the unique needs, barriers, and priority topics that must be addressed in the organization's educational sessions.	Informed by the results of the needs assessment, WWHF developed a new education unit focusing on breastfeeding benefits and management, and included it in their evidence-based women's Grape Vine health education curriculum. The Grape Vine program focuses on hard-to-reach populations in rural and urban areas. A total of 80 women were provided education through this new unit. Additionally, WWHF trained 30 registered nurses to present the new educational unit, "Supporting Breastfeeding Mothers and Babies."

Note. WIC = Women, Infants, and Children.

**Table 4.** Assessment of Organizations' Limitations to Sustainably Support Breastfeeding.

Organization	Organizational Assessment of Own Limitations	Sustainable Systemic Changes
Dakota County Public Health Department (DCPHD), Minneapolis, MN	Dakota County was a leader among breastfeeding-friendly health departments and regularly promoted breastfeeding, but only 8% of its staff had advanced breastfeeding training. Although all DCPHD WIC staff were CLCs, they had limited staff, which resulted in restricting breastfeeding support to mostly first-time pregnant women. Other lactation support services in the county were fee-for-service. This created a barrier to accessing services.	Dakota County improved its programming by developing a no-cost rapid-response system to support low-income women, within 24 hours of referral. In addition, they implemented no-fee support groups in the community. To address organizational capacity, they trained all staff members on basic breastfeeding support and improved policies to ensure care.
Douglass County Health Department (DCHD), WIC program Omaha, NE	DCHD had a breastfeeding support program established through the WIC Peer Counseling program and a breastfeeding support policy within the department. The WIC site located at the Charles Drew Health Center (CDHC) serves a majority of African American mothers. However, none of the nine peer counselors were from the African American community. In addition, the center staff lacked breastfeeding support skills.	DCHD provided technical assistance and expertise to the CDHC to create a breastfeeding-friendly environment in the center. They developed two new breastfeeding support policies, which were incorporated into the center's policy and procedure manual. DCHD provided evidence-based training to CDHC staff. The DCHP WIC program and Omaha Healthy Start provided group and one-on-one breastfeeding support resources to African American families. The established policies facilitated the sustainability of breastfeeding efforts beyond the life of the grant, and the support groups were financially secure by the health department and partners.
Esperanza Health Centers, Chicago, IL	Esperanza provides prenatal, postpartum, and pediatric services to underserved Latinas. Breastfeeding intentions were high, but duration rates, especially exclusivity rates were low. On the basis of patient feedback, low breastfeeding rates were often the result of a lack of education and access to peer and professional support for breastfeeding.	Esperanza modified its electronic medical system to ensure that clients received nine points of breastfeeding support contact, starting from the first prenatal medical visit to the infant's first birthday. Also, by leveraging additional funds, they implemented peer support groups. In addition, they increased organizational capacity to support breastfeeding by training all staff members, from the front desk to physicians, on the importance of breastfeeding and providing culturally appropriate support, in the clients' native languages.
Florida Department of Health, Broward County, Fort Lauderdale, FL	Broward County conducted a community breastfeeding needs assessment to understand their clients' major challenges. The results highlighted the need for in-hospital support and accessible lactation support services upon discharge.	The Broward WIC program increased access to services by expanding to community spaces that were familiar to African American families. By establishing a memorandum of agreement with a local hospital peer counselors were able to provide lactation support right after delivery. They enrolled eligible WIC clients, prepared a breastfeeding care, and ensured all clients were referred to the culturally attuned peer support groups, "It's Natural—Sisters Taking Charge."
Florida Department of Health, Lee County (DOH-Lee), WIC program, Sarasota, FL	The DOH-Lee WIC program had an established breastfeeding peer counseling program with skilled staff members and provided ongoing education and support. However, there was a lack of diversity in the lactation workforce and limited breastfeeding support for African American families, a lack of coordinated breastfeeding efforts, and there were no community-wide discussions on these issues.	DOH-Lee developed a new stand-alone local breastfeeding coalition that incorporated breastfeeding into the countywide coalition's health improvement goals. They established cross-training of WIC and hospital staff members to improve continuity of care. Leveraging the health coalition leadership buy-in, they were able to sustain commitment to breastfeeding support through integration with infant mortality and nutrition goals.
St. John Hospital & Medical Center, Detroit, MI	St. John Hospital found that the night shift was a vulnerable time for breastfeeding, with no available support, maternal exhaustion, and normal infant restlessness contributing to unnecessary supplementation. Furthermore, after discharge, despite the rich landscape of community programs available to low-income mothers, most were underused. St. John Hospital surveyed staff members and found that discharge staff were poorly educated on community resources and were not referring patients to services.	St. John Hospital created the Mother Nurture evening peer counselor position within the network of hospitals in its system. This innovative program extended in-patient lactation care to the night shift. The peer counselor was also trained as a community health worker, who understood and actively promoted community resources. They also implemented outpatient clinics, weekly support groups, and offered food, transportation, and other resources for those in need.
The Brooklyn Hospital Center WIC program, Brooklyn, NY	The Brooklyn Hospital Center recognized that WIC mothers in need of immediate help were unable to contact peer counselors or any other type of support, especially after business hours and on weekends.	Through its project, the Brooklyn Hospital WIC program provided cell phones to all peer counselors and developed a text messaging program. They trained peer counselors on the system, allowing clients to access peer counselors directly. Mothers could receive phone or in-person hospital support. They could also schedule home visiting support immediately after birth and during the first 2 critical weeks postpartum.

Note. CLC = certified lactation counselor; WIC = Women, Infants, and Children.

opportunities to improve the nature and quality of their breastfeeding services to their communities by implementing PSE changes within their organizations.

Identified organizational limitations included having poorly trained staff members who are not knowledgeable about breastfeeding; not providing a welcoming space for mothers to breastfeed within the agency; offering support services that families are not able to access because of timing, location, and are not welcoming of family members and older siblings; and providing inconsistent, conflicting messaging within the organization staff.

### *Leveraging Internal and External Resources*

In the face of limited resources, it is challenging to make a lasting and sustained impact on many public health efforts, including breastfeeding (Centers for Disease Control and Prevention, 2012). Strategically leveraging internal and external resources through integration and co-location of services may extend the lactation support safety net available to families and is part of a PSE change solution.

Grantees that used NACCHO funds to complement or expand preexisting projects, instead of investing in a downstream lactation support interventions (limited to the provision of direct services only) were more effective in supporting a larger number of families during and beyond the funding period. Grantees leveraged resources not only to sustain programs but also to benefit partners and the broader community. Some outcomes of leveraging were expanding program or organizational capacity to serve more families, supporting program activities sustainability, increasing the use of current and new programs and services, meeting identified needs of the community, providing and identifying unused or underused resources, and avoiding duplication of services.

Some grantees formally incorporated breastfeeding intervention activities into their organizational strategic plans. As a result, they were able to make essential lactation services available to a vast number of women and families by integrating those services into existing programs (Table 5). Across all projects, organizations invested grant dollars to increase the capacity of staff members, contractors, community volunteers, and staff members from partner organizations to provide lactation support services in the community. A nondistinct count of 654 people received lactation-related training through NACCHO grant funds. Among this group, some people received multiple types of training (e.g., as a peer counselor and subsequent training to become a certified lactation counselor (CLC). Fifty-one International Board Certified Lactation Consultants (IBCLCs) received advanced lactation training. Sixty-nine individuals received required training to qualify for the IBCLC examination. Two hundred

seventy-nine people received training to qualify for the CLC or equivalent certification exam, and 255 people were training as peer counselors.

Grantee partnerships with other community organizations enabled the leveraging of multiorganizational resources, skills, and policies and systems to expand service capacity, improve coordination of referrals, and integrate breastfeeding support into other public health and social services programs. Collaboration with agencies that also provide health services to the community allows leveraging of space, staff, and programming. In addition, partnerships with nontraditional and nonhealth agencies (e.g., faith-based organizations, social service agencies, housing agencies, and transportation offices) created the space to broaden the reach of both organizations.

Breastfeeding services should be incorporated into or co-located with and be provided around the same time as existing well-attended programs, rather than being stand-alone programs (Lilleston, Nhim, & Rutledge, 2015). Programs prime for integration are services that already have mandatory attendance or participation (e.g., maternal and infant home visitation programs and prenatal care program such as Centering Pregnancy). This strategy of providing a one-stop shop for program participants enables families to overcome barriers of lack of transportation and time. Grantees were innovative in their approach to service integration and co-location. Table 6 shows selected grantees examples leveraging partnerships.

### **Conclusions**

Community agencies seeking to provide breastfeeding promotion, education, and support services in black and low-income communities in an effort to ameliorate breastfeeding disparities must operate with the understanding that suboptimal breastfeeding rates among these populations are influenced largely by social and systemic barriers that exist outside the parents' sphere of power (Lutter & Morrow, 2013; Temple, 2017). Programs focusing solely on individual behavior change miss the opportunity to identify and creatively address the underlying needs of the families within their communities (Honeycutt et al., 2015).

To implement PSE changes, organizations must understand and address the needs of the community and strategically plan to sustain activities initiated with time-limited grants by incorporating breastfeeding services into the agency's larger programming and by building solid community partnerships (Centers for Disease Control and Prevention, 2012). Partnerships are critical for PSE change implementation and can strengthen collective capacity to address structural barriers that contribute to inequitable breastfeeding rates that local agencies cannot overcome alone.

**Table 5.** Leveraging Internal Resources.

Organization Name	Preexisting Resources	Program Expansion
Erie County Department of Health, Buffalo, NY	Through previous CDC funding, Erie County expanded the Healthy Future for All coalition and supported implementation of breastfeeding friendly practices designation program. Erie County piloted seven Baby Cafés (the first in New York State) offering peer support drop-in centers facilitated by lactation professionals.	Erie leveraged funding to expand and sustain the county's comprehensive breastfeeding program. They collaborated with United Way to continue improving breastfeeding rates among Medicaid-eligible women in communities of color. They trained staff members as master trainers to enable in-house educational credits for recertification of CLCs and provide hospital staff training. With more trained staff, Erie County was able to implement additional Baby Cafés. In addition, they trained medical providers on appropriate documentation and billing practices to build sustainable lactation reimbursement systems.
Family Health Center of Worcester (FHCW), Worcester, MA	FHCW provided outpatient prenatal care, inpatient obstetrics, centering pregnancy groups in different languages, and WIC services to a diverse population. The center provided each client with a multilingual/multicultural MCH advocate who coordinated care and offered medical interpretation throughout the pregnancy, labor and delivery, and during the first year of life.	FHCW leveraged its clinic space, to implement a twice weekly Baby Café. FHCW provided MCH advocates with breastfeeding support training to leverage their skills and established relationships with clients. MCH advocates attended meetings and provided interpretation for their clients. FHCW created a successful internal and external referral form. They developed a referral follow-up system through the Baby Cafés breastfeeding consultation report. FHCW reported increased internal continuity of care and an increase in referrals and attendance.
Maternity Care Coalition (MCC), Philadelphia, PA	MCC supported the Breastfeeding-Friendly Philadelphia initiative, providing support to hospitals becoming baby-friendly and to local businesses supporting breastfeeding employees. MCC also provided prenatal education including basic breastfeeding education during home visits.	MCC expanded and sustained their breastfeeding activities by integrating breastfeeding support into their existing home visiting programs. They trained 10 advocates as breastfeeding champions/CLCs to provide hospital-based, home visiting, phone calls, and texting breastfeeding support. They also implemented monthly breastfeeding support groups and collaborated with an external IBCLC for cases in need of advanced support.
National Nursing Centers Consortium   Philadelphia Nurse-Family Partnership (NNCC-NFP), Philadelphia, PA	The NFP is a U.S. national home-visiting model that partners a registered nurse with first-time mothers from pregnancy until their children turn 2 years old. NNCC-NFP nursing staff members provided basic breastfeeding education and support to clients.	NNCC-NFP leveraged experience of visiting nursing staff to provide breastfeeding education and trained 11 to become IBCLCs. They are now able to provide advanced lactation support to all clients during home visits. In addition, peer lactation counselors were trained to facilitate breastfeeding support groups and provide in-person and telephone counseling to mothers. The program increased capacity by contracting with private practice IBCLCs.
Teen Outreach Pregnancy Services (TOPS), Pima and Maricopa County, AZ	TOPS provided adolescent-specific evidence-based pregnancy and childbirth education through free classes in the community. TOPS educational curriculum included basic breastfeeding education as part of the late pregnancy education. There were no peer or professional support groups available for the clients within the organization.	TOPS updated the curriculum to weave breastfeeding messages throughout the curriculum. They improved data collection tools for monitoring the duration of breastfeeding and other lactation information collected monthly through postnatal logs. They also implemented breastfeeding support groups as part of a normal operating procedure. TOPS increased organizational capacity by training two of the nursing staff as IBCLCs to provide advanced and hands-on lactation support.

Note. CDC = Centers for Disease Control and Prevention; CLC = certified lactation counselor; IBCLC = International Board Certified Lactation Consultant; MCH = maternal and child health; WIC = Women, Infants, and Children.

**Table 6.** Leveraging External Partnerships.

Organization	Issue	Leveraging Solution
Arkansas Breastfeeding Coalition (ABC), Little Rock, AR	In rural, underserved communities in the Arkansas delta region, women face multiple societal barriers that hinder their ability to access breastfeeding support services. County residents have no access to public transportation, limited Internet access, and no trained lactation service professionals available to provide breastfeeding support.	ABC implemented strategic partnerships and leveraged resources to address barriers. They hired an African American peer counselor and trained her as a CLC. In collaboration with the local hospital, she provided in-hospital support to new mothers. In addition, ABC developed a partnership with Say Yes to Best, a baby safety project. Breastfeeding support services were integrated into the program with the peer counselor serving as an intermediary who distributed baby safety items to families.
Children's Home Society of Florida (CHS), Winter Park, FL	CHS has worked with pregnant and postpartum women, providing home visiting services, including Healthy Start and Early Head Start. There were no baby-friendly hospitals serving Pine Hills residents, and their community lacked workplace breastfeeding policies and breastfeeding-friendly early care education facilities. There was only one part-time professional lactation support provider located in the local WIC office. Transportation, competing demands of school and work, and lack of autonomy and social support are additional barriers for adolescent mothers.	CHS partnered with Evans High School to implement a school-based breastfeeding support program for student mothers. CHS leveraged the school space by equipping a lactation room with a hospital-grade pump for the student mothers to pump during the school day. Additionally, a new lunch program was introduced for pregnant and breastfeeding students to receive additional healthy foods. CHS staff members also engaged teen mothers' families to improve support at home. Students were encouraged to invite their support system, including grandmothers and fathers, to group meetings. They also provided support through their online portal, <a href="http://www.ifeedmybaby.com">www.ifeedmybaby.com</a> .
Contra Costa Health Services (CCHS), WIC, Martinez, CA	Sutter Delta Medical Center (SDMC) delivered a high rate of low-income, African American babies in Contra Costa County. These women received prenatal care at CCHS but elected to deliver at SDMC because of easier accessibility. The absence of a care coordination system resulted in many women not receiving postdischarge breastfeeding services. Other challenges included inadequate breastfeeding training for SDMC perinatal staff and poor access to low-cost hospital-grade breast pump rentals.	CCHS WIC and SDMC established a partnership to provide in-hospital support by a WIC-funded African American IBCLC. In an effort to increase staff cultural competency and capacity, WIC also provided breastfeeding training to SDMC perinatal staff and other East County health care providers. WIC instituted a free pump rental program for clients delivering at the hospital. Finally, they established a system to coordinate postdischarge support and transfer patient care between SDMC and CCHS.
Monroe County Department of Public Health, WIC Rochester, NY	Monroe County WIC provided high-quality breastfeeding support services to clients; however, breastfeeding support group attendance was low.	Monroe County WIC co-located breastfeeding support services where pregnant and postpartum women were already going for medical care. BFPC, both individual and group support, was made available during routine appointments. This key partnership with providers increased referrals to WIC BFPC program(s), promoted early enrollment in WIC, and increased prenatal and postpartum support. Monroe County WIC has expanded from three to five locations.
Public Health Solutions (PHS), New York, NY	Prior to the NACCHO grant, there were limited trained lactation support providers available in the community. There are different agencies servicing the community, collecting breastfeeding data using different systems, so collecting overall community breastfeeding data was challenging.	PHS developed and implemented systemic changes to increase breastfeeding service capacity within the Jamaica–Southeast Queens community. They established eight memoranda of understanding, with partners including Nurse Family Partnership, Healthy Families Jamaica, hospitals, WIC clinics, and other community-based organizations. PHS trained more than 60 staff members as CLCs. Through these collaborations, they developed a unique tracking system for data reporting allowing them to share data and streamline support.

Note. BFPC = breastfeeding peer counseling; CLC = certified lactation counselor; IBCLC = International Board Certified Lactation Consultant; NACCHO = National Association of County and City Health Officials; WIC = Women, Infants, and Children.



## Authors' Note

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC. The authors prepared this article within the scope of their employment with NACCHO.

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