

# Increasing Access to Breastfeeding Support through Local WIC Agencies Services Expansion



## INTRODUCTION

In 2014, NACCHO, in partnership with the Centers for Disease Control and Prevention (CDC) Division of Nutrition, Physical Activity, and Obesity (DNPAO), implemented the Reducing Disparities in Breastfeeding through the Peer and Professional Support project to increase breastfeeding rates among African American and underserved populations. The effort supported the implementation of 72 community-level peer and professional breastfeeding support programs by local health departments (LHDs), community-based organizations (CBOs) and hospitals in 32 states and territories from January 2015 through May 2016. A total of nine of these communities (*Cohort 2*) were specifically funded to provide support to hospitals enrolled in the Enhancing Maternity Practices (EMPower) Initiative, a CDC-funded, hospital-based quality improvement initiative focusing on maternity practices leading to Baby-Friendly Designation based on the [Ten Steps to Successful Breastfeeding](#).

This brief highlights strategic activities for breastfeeding support service expansion conducted by a subset of grantees who self-identified as a local Women Infants and Children (WIC) agency. Specifically, the funded local WIC agencies enabled broader access to services by leveraging community partnerships and implementing small changes to organizational policies and systems. A total of 17 grantees self-identified as local WIC agencies, of which 13 operated as part of a LHD. WIC grantees provided direct breastfeeding support, based on recommendations of *The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies* while addressing families' challenges to access lactation services.

## WIC AND BREASTFEEDING SUPPORT

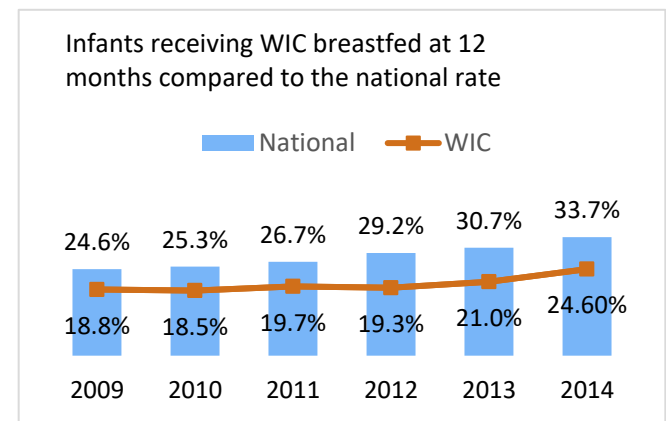
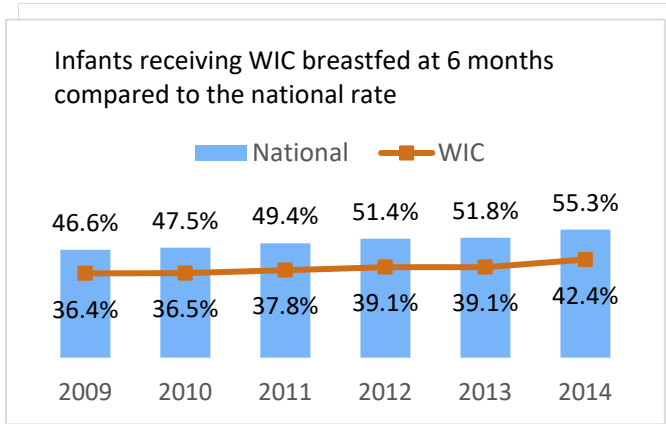
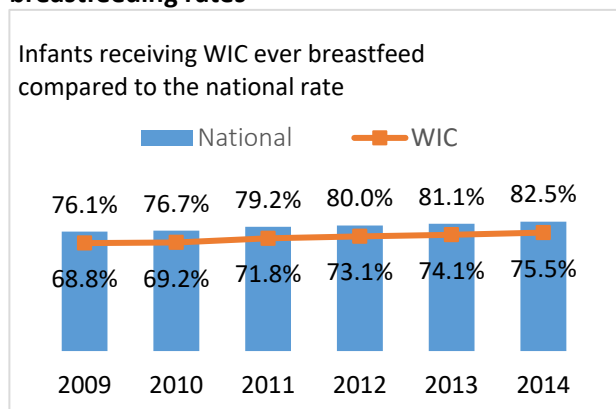


The WIC program has played a critical role in efforts to increase breastfeeding rates, particularly among low-income women, through the implementation of breastfeeding education, peer support, and enhanced food packages for breastfeeding women (USDA, 2016). Studies show that providing peer and professional lactation support increases breastfeeding duration and exclusivity rates (USDA, 2010; Britton et al., 2007). The 2015 WIC Breastfeeding Policy Inventory Report indicates that 69% of the 1,800 local WIC agencies have peer counseling programs (Forrestal et al., 2015). A local WIC agency may have multiple clinical sites throughout their service area. Among the WIC agencies with peer counseling programs, peer breastfeeding support was available in an average of 83% of clinic sites, reaching about 86% of the WIC population (Forrestal et al., 2015). While WIC agencies have been successful at providing peer support, less than 40% of all state and local WIC agencies provide clients with professional lactation support services of an International Board Certified Lactation Consultants (IBCLC)(Forrestal et al., 2015).

Direct lactation education and support in the WIC program is delivered by frontline staff and enhanced by breastfeeding peer counselors where funding is available. WIC agencies also provide educational materials, breast pumps and supplies, use social marketing campaigns to normalize breastfeeding, and extend program eligibility along with the provision of larger food packages for breastfeeding mothers (USDA, 2016). Local WIC agencies also increase availability of lactation support to low-income women and families by providing services at diverse community locations including local health departments, hospitals, clinics, and CBOs.

Although breastfeeding education and support are cornerstones of the federal WIC program — and although breastfeeding rates have been increasing within the program — socio-demographic factors, such as WIC participation, income level and maternal education, are inversely related to breastfeeding initiation and continuation. According to the latest National Immunization Survey, 82.5% of babies born in 2014 were breastfed, while only 75.5% of infants receiving WIC were ever breastfed (Figure 1). Beyond initiation, there are significant disparities in breastfeeding duration rates among WIC recipients compared to national rates and to WIC-eligible but non-WIC recipients. Among WIC recipients, 42.2% breastfed at six months, compared to 55.3% nationally and 60% of WIC-eligible, but non-WIC recipient women. Breastfeeding rates were also lower among WIC recipient infants breastfed at 12 months, at a rate of 24.6%, compared to 33.7% nationally and to 39.5% among WIC-eligible, but non-WIC recipient babies (CDC, 2015).

**Figure 1: Breastfeeding rates for WIC receiving infants have increased but still lag behind national breastfeeding rates**



Barriers such as availability and accessibility of breastfeeding support within the community can prevent low-income women from breastfeeding at optimum levels (American Public Health Association, 2013). These factors are compounded by the overall lack of breastfeeding education, unsupportive hospital practices, aggressive advertising of human milk substitutes, and lactation problems. Furthermore, the early return to work due to lack of paid leave and unsupportive workplace and childcare practices also contribute to reduced breastfeeding duration (Office of the Surgeon General, 2011; Dunn et al., 2015). Low-income women also encounter obstacles related to transportation and financial capacity to pay for breastfeeding supplies and support, which often results in suboptimal or no lactation care (National WIC Association, 2016).

Several studies have investigated the specific challenges faced by WIC participants to breastfeed, as the reasons for persistent lower breastfeeding rates in the WIC population are complex (Hedberg, 2013; Houghtaling, 2017). One reason is that the WIC program engages heavily in the distribution of infant formula for WIC clients who self-report not breastfeeding or partially breastfeeding. According to the Fiscal Year 2010 WIC food cost report, the

investment for breastfeeding education and promotion was less than \$350 million, compared with \$920 million on expenditures for formula. Thus, the provision of formula at no cost may outweigh the impact that breastfeeding promotion programs can have on breastfeeding rates for low-income women who are young, lack role models, and lack a support system (Houghtaling, 2017). The overarching recommendation from studies is to change the public perception that “the focus of WIC is access to free formula,” to “WIC provides breastfeeding promotion and support” (Hedberg, 2013; Houghtaling, 2017). Many local agencies have been persistently working towards this goal through the implementation of peer counseling and innovative practices to expand breastfeeding support.



### NACCHO BREASTFEEDING PROJECT AND WIC-AGENCY GRANTEES

Beyond the provision of direct breastfeeding support services, WIC-agency grantees performed additional activities to engage their communities and enhance reach, recruitment, and retention of women and families in their service delivery area. For example, 60% of the WIC-agency grantees conducted a needs assessment to understand community needs and learn how to better serve clients. Other activities included enhancing partnerships to leverage resources, and integrating or co-locating breastfeeding support services into other public health programs outside of the traditional WIC-agency setting. Even with limited funds and short timelines, many grantees were able to sustain grant-funded activities to improve and expand breastfeeding support services that outlasted the funding period for low-income women and mothers of color.

**See table 1 for list of local WIC-agency grantees and an overview of the individual projects.**

### COMMUNITY PARTNERSHIPS TO ADVANCE BREASTFEEDING GOALS

Establishing coordinated community networks to promote, protect, and support breastfeeding is key to ensuring that women have high-quality lactation education and support across the continuum of care. An important part of breastfeeding support is having access to trained individuals with established relationships in the healthcare community and that are flexible enough to meet mothers’ needs outside of traditional work hours and locations (Office of the Surgeon General, 2011). One report indicates that 89% of local WIC agencies worked collaboratively with hospitals, health centers, and providers’ offices to promote breastfeeding and provide support services. However, insufficient funding and resources and lack of defined peer counseling program goals limit the overall capacity to expand access to breastfeeding support through these enhanced WIC services (Baumgartel & Spatz, 2013).

CDC’s evaluation of previous funding of community-level breastfeeding programs indicates that creating partnerships, leveraging funds and resources, establishing referral networks, cross-training staff, and integrating breastfeeding support services within existing community-based programs contribute to sustainable programs (Lillestone et al., 2013). NACCHO grantees were encouraged to establish local and state partnerships, and collectively WIC-agency grantees established or enhanced 146 community partnerships. Those partner organizations included public health and healthcare agencies (e.g., hospitals, community health centers, LHDs, and healthcare providers), CBOs, and breastfeeding coalitions. WIC-agency grantees also partnered with non-traditional partners (e.g., social services, food banks, state and local governmental agencies, and faith-based organizations) that support clients’ basic needs and address some of the structural barriers to accessing care.

Assessing collaboration among partners is often difficult (Frey et al., 2006), however strong collaboration is necessary for the sustainability of intra- and inter-agency programs and services, particularly time-limited and grant-funded programs. WIC-agency grantees self-assessed the complexity of their partnerships, using the Collaboration Continuum Model. This model views collaborative activities on a continuum, and as partners move across the continuum, the relationship becomes more complex, investment increases, and risk also increases (Zorich,

2008). Analysis of these collaborative components (by weighing the components from 0 – no collaboration to 5 – integration/convergence) showed that overall, WIC-agency grantees developed stronger collaboration relationships with hospitals (average score 4.8) and fewer strong collaborations with faith-based organizations (1.7).

Reported outcomes from collaborations between WIC-agency grantees and other organizations translated into expansion of WIC services to hospitals, churches, health centers, and libraries. For example, WIC-agency grantees reported that through collaboration with hospitals, they were able to secure hospital space for breastfeeding support meetings, enable hospital visits by WIC staff, deliver culturally appropriate breastfeeding training to hospital staff, establish and improve post-discharge referral systems to WIC breastfeeding services, and develop a steering committee to advance breastfeeding goals in the community. Another example of partnership activities was the provision of cross-training for WIC and partners' staff to increase a skilled lactation support workforce, which resulted in 138 multi-level peer and professional staff trained, and accounted for 769 hours of basic and advanced lactation management and support training.

### **Support on the go through partnerships**

The Monroe County Department of Public Health, in Rochester, New York, enhanced one of its most complex collaborative partnerships by developing or expanding 14 multi-institution, multi-disciplinary partnerships throughout the project period. Monroe County leveraged funds by integrating multiple grants to improve its referral network and integrate lactation support into other healthcare services (e.g., CenteringPregnancy® and multiple pediatric offices and prenatal care clinics) for low-income families. They also implemented a social marketing campaign, including radio ads, and developed life-sized cutouts of breastfeeding women that were cross-promoted by partners. In Savannah, Georgia, the Glynn County Health Department partnered with Mercy Housing to use space within the housing development to conduct breastfeeding classes and support groups within neighborhoods with low breastfeeding rates, thus making the support services easier to access.

### **Available and accessible support after hours**

The Brooklyn Hospital Center in Brooklyn, New York developed multiple policies for their text-based

lactation support program by WIC peer counselors, which included standardized texting scripts and instituted supervisory review and data collection protocols in accordance with hospital rules and regulations. The hospital also built staff capacity to provide text-based services by training more than 30 WIC personnel on texting policies and procedures, and educating clients with standardized information on how to get support outside of traditional office hours. Lastly, care continuity was improved through the after-hours and weekend text support provided by WIC Peer Counselors and through increased WIC-physician interactions resulting from protocol shifts.

### **In-hospital peer counseling support**

The Florida Department of Health, Broward County (FOH-Broward County) in Fort Lauderdale, Florida implemented an in-hospital peer counseling program. FOH-Broward County established a Memorandum of Agreement (MOA) with Holy Cross Hospital (an EMPOWER hospital) to establish scope of practice guidelines for WIC peer counselors to provide in-hospital lactation support to WIC mothers post-delivery. FOH-Broward County developed a Peer Counselor Hospital Curriculum to increase WIC staff capacity to operate within the hospital setting and instituted protocols for peer counselors to enter data obtained through hospital visits into the public health WIC data system (Florida Department of Health, 2016). The care continuity for WIC-enrolled and WIC-eligible mothers delivering at Holy Cross Hospital was improved through in-hospital lactation support and mandated follow-up by WIC Peer Counselors, and through hospital distribution of WIC breastfeeding education materials and supplies. Due to the program's success, four additional area hospitals also implemented the in-hospital peer counseling program. The program was sustained financially by the increased WIC enrollment of new mothers recruited at the hospital.

Overall, the varying complexity of collaborations allowed WIC-agency grantees to establish or enhance partnerships that improved sustainability of programs and services, increased community-level access to culturally appropriate breastfeeding support resources, increased educational materials and services to mothers and family members, and improved the quality of community-level breastfeeding support. Also, WIC-agency grantees with established longstanding relationships prior to

this grant reported that these partnerships facilitated program implementation and service delivery.



## RECOMMENDATIONS

Through the project, WIC grantees demonstrated the benefits of establishing or enhancing partnerships to increase access to support services and achieve sustainability of the expanded services. They also identified important lessons for other local WIC agencies wanting to replicate their successes, which include:

- **Identify and engage critical traditional (e.g., hospitals, breastfeeding coalitions, home visiting and other maternal-child health programs) and non-traditional partners (e.g., housing, transportation, churches and other agencies servicing the same community) to support funded and in-kind transactions.** Leveraging partnerships can strengthen the capacity of local WIC agencies to provide quality breastfeeding support to WIC clients. These community partners can support expansion or enhancement of current WIC services to low-income pregnant and postpartum women in communities with significant barriers to accessing breastfeeding support by promoting services, helping to address specific community needs, and co-locating and integrating lactation support activities within their own services.
- **Understand the breadth of services provided for women and children within their agency.** Before expanding services, local WIC agencies should learn directly from the community about their specific *needs and wants* through a needs assessments. Identifying current services and gaps and what type of additional services can meet the needs of their clients is the first step in

a successful program implementation. Breastfeeding support services should be frequent and predictable, through scheduled visits and not offered reactively, in which women are responsible for initiating the contact (Renfrew, 2012). A *needs assessment* will also help local WIC agencies identify community locations where enhanced services can be provided consistently and best meet the identified needs of the target population.

- **Effective collaborations do not occur overnight.** Local WIC agencies should set aside time and commit to establishing partnerships. Although NACCHO provided funding and over 1,500 hours of training and technical assistance to grantees, the compressed timeline for program implementation limited grantee abilities to build integrated partnerships.
- **Although the policies on formula provision are set at federal and state levels, local WIC agencies can intensively promote and market the WIC program as a breastfeeding support program** featuring trained peer counselors and professional staff, highlighting the enhanced food packages and provision of breast pumps and supplies for breastfeeding mothers and babies. Further, local WIC agencies can continuously train and motivate LHD and WIC staff to actively support pregnant and postpartum mothers, since motivation and skills to provide breastfeeding education and support among staff vary from office to office.

## CONCLUSION

Local WIC agencies are uniquely positioned to lead collaborative efforts and systems change to increase access to breastfeeding support for WIC-eligible clients and potentially reduce the persistent breastfeeding inequities among this population. It is important for local WIC agencies to identify the specific strengths and needs of their communities to tailor the partnerships to meet client needs. By exploring the optimal mix of who should provide services, how those services are delivered to communities, and when and where they should be made available, local WIC agencies can continue to increase breastfeeding rates among low-income women.

**TABLE 1. LOCAL WIC AGENCY GRANTEES SERVICE EXPANSION ACTIVITIES**

Organization	Project Overview
<b>Alameda County Public Health Department, CA</b>	This LHD developed a breastfeeding education curriculum for African Americans informed by results from a community needs assessment. In addition, they developed a comprehensive engagement plan. It collaborated with a health center to provide peer/professional support through the Breast Friends group. They trained 12 community members on breastfeeding support and group facilitation. Throughout the project, they conducted outreach, promoting their work to 43 community organizations, including local providers, parenting groups, shelters, and apartment communities. Their success relied on investing time to educate the community and organizations about their services and engaging partners to personally refer clients to their program. The program is now a reference in the community and has already expanded to other locations, increasing access to lactation care in their community.
<b>Barren River District Health Department, KY</b>	This LHD in a rural area surveyed moms to determine recruitment strategies for rural women and improve the quality of their programming. In addition, they conducted a needs assessment with local businesses to understand gaps in workplace breastfeeding support. Further, they implemented a breastfeeding support program within their organization, and opened an employee pumping room. They hired a diverse workforce to serve as peer counselors (PCs), so clients could choose the PC to receive support services. They also strengthened their partnership with the local hospital and increased referrals. As a result, the countywide health coalition incorporated breastfeeding support into the coalition’s strategic plan.
<b>Berrien County Health Department, MI</b>	This LHD provided breastfeeding support through multiple channels, including home visiting, 24/7 telephone support, and emails. They also developed marketing materials to promote personalized support from peer counselors to WIC-eligible mothers. They enhanced a partnership with area hospitals to strengthen bidirectional referrals and sharing of resources, and established a new breastfeeding coalition, for which they were able to secure three years of funding to continue supporting these activities.
<b>Brooklyn Hospital Center, NY</b>	This hospital-based WIC focused on reducing clients’ challenges in contacting peer counselors (PC) during evenings and weekends _ an identified need in their pre-implementation analysis. They used funds to develop a two-way text-based lactation support program and provide cell phones to PCs. They developed policies for the texting program that included standardized texting scripts, and instituted supervisory review and data collection protocols in accordance with hospital rules and regulations. They trained more than 30 WIC personnel and 150 hospital staff on breastfeeding support. Lastly, care continuity in the general environment was increased through the continuous support by WIC PCs and through increased WIC-physician interactions resulting from protocol shifts.
<b>Contra Costa Health Services, CA</b>	This LHD worked in collaboration with a hospital system to improve breastfeeding services for African Americans (AA). They increased the capacity of WIC staff and over 25 other community health partners by providing culturally appropriate breastfeeding support training and hired an AA IBCLC to provide services at WIC and at the hospital. The average number of people served by each person trained was ten people/day. They also pioneered a system of post-discharge care in one of the hospitals. This addressed an identified need regarding difficulties to follow up with AA mothers, because the prenatal care was received in another agency. Due to the project success, the hospital system created a new position for a non-RN IBCLC, hired as a lactation consultant, who continues to provide culturally appropriate support and effectively refer eligible women to WIC, closing the continuity of care gap.
<b>Douglas County Health Department, NE</b>	This LDH provided technical assistance and training to a longstanding partner agency, a FQHC, to improve its breastfeeding practices. They developed two breastfeeding support policies, a procedures manual, and support groups in the health center to improve breastfeeding support for employees and clients. Due to the project success, this LHD was able to secure additional funding for similar implementation at another location.
<b>Florida Department of Health - Bay County, FL</b>	This LHD increased its own and its partners’ organizational capacity by hosting a Certified Lactation Counselor (CLC) training for staff and partners, including La Leche League and Healthy Start staff. They also expanded their technical assistance by training additional childcare centers to become Florida-designated breastfeeding-friendly childcare centers. They hosted support groups and several quarterly socials for African-American groups where they promoted breastfeeding and individual counseling with newly trained CLCs and IBCLC.
<b>Florida Department of Health - Broward County, FL</b>	This LHD implemented an in-hospital peer counseling program. They established a Memorandum of Agreement (MOA) with Holy Cross Hospital (an EMPower hospital) to establish scope of practice guidelines for WIC peer counselors (PC) to provide in-hospital lactation support to WIC mothers post-delivery. They developed a Hospital-based Peer Counselor Curriculum to increase WIC staff capacity to operate within the hospital and instituted protocols for PC to enter data obtained through hospital visits into the public health WIC data system (Florida Department of Health, 2016). The care continuity for WIC-enrolled and WIC-eligible mothers delivering at the hospital was improved through in-hospital lactation support and mandated follow-up by WIC PC, and through hospital distribution of WIC breastfeeding education materials and supplies. Due to the program’s success, four additional area hospitals also implemented the in-hospital peer counseling program. The program was sustained financially by WIC due to the increased enrollment of new mothers recruited at the hospital.

<b>Florida Department of Health - Duval County, FL</b>	This LHD targeted high infant mortality low breastfeeding rates areas identified through a needs assessment. To address challenges of accessing services, this agency provided bus passes for women to attend support groups and individual sessions with PC and with the IBCLC. PCs provided phone support after hours and during weekends and holidays, as needed. This LHD also provided a custom-designed, department-wide training to community health workers, front desk staff, nurses and physicians, including training on newly developed referral forms. As a result, there was an increase in internal and external referrals of clients to the lactation support providers.
<b>Florida Department of Health - Lee County, FL (Cohort 2)</b>	This LHD started a local breastfeeding coalition, which became part of the well-established countywide health coalition. One of this partnership's goals was to reduce inequities in breastfeeding. Lee County also cross-trained three LHD staff and two paraprofessional staff from the partner hospital, including training in each other's setting to gain perspective outside of their regular environments and to apply consistent messaging through the continuum of care. As a result, WIC moms received immediate postpartum support and throughout their hospital stay. Additionally, WIC mothers were referred to WIC lactation support providers, improving the continuum of care.
<b>Glynn County Board of Health, GA (Cohort 2)</b>	This LHD recruited and trained community members as culturally attuned peer counselors (Community Transformers training) to provide support during group meetings. They partnered with the housing authority to use space in the community, making access to services easier for the new mothers. They also trained the LHD staff about the Breastfeeding Friendly Hospital Initiative and the LHD's role in supporting the project.
<b>Gwinnett County Health Department, GA (Cohort 2)</b>	This LHD worked with the hospital on closing the continuity of care gap by providing educational materials to prenatal offices and implementing weekly breastfeeding support groups in the hospital. They also worked with the hospital to update the resource guide with additional community resources and make it more culturally sensitive.
<b>Monroe County Department OF Public Health, NY</b>	This LHD had poor attendance at their support group, so they decided to expand services and go mobile by integrating services within hospitals and local providers. They co-located services by embedding breastfeeding peer counselors (PCs) into the main OB and pediatric providers for low-income women to provide education and immediate support during routine appointments. They ran support groups at these practices and had clinical hours available for one-on-one support. The PCs routinely conducted rounds to visit new mothers before hospital discharge and personally refer them to these postpartum support services. They also rotated life-size nursing mother cutouts between the providers' office to normalize breastfeeding.
<b>Northeast Health District WIC, GA</b>	This LHD implemented the Athens Black Mothers Breastfeed project in a rural area targeting African-American mothers. The pre-implementation needs assessment showed a lack of lactation support providers representative of the population, so they trained three African Americans as peer and professional breastfeeding support providers. They also developed the Sister Circle support group, which was delivered via a private social media group and in person. Due to the success of the online group, selected participants were trained on breastfeeding support to facilitate the virtual group creating a permanent, sustained mother-led group.
<b>Paris-Lamar County Health Department, TX</b>	This LHD implemented the MOM2MOM peer-professional support group in the community to include non-WIC mothers. The effort was successful, especially with Hispanic new mothers. It also enhanced its partnership with an area hospital and established a formal agreement that granted permission for WIC peer counselors and lactation consultants to visit clients immediately after delivery and to provide referrals to support groups. Due to the group's success, the LHD was able to sustain the biweekly meetings.
<b>Shelby County Health Department, TN (Cohort 1 &amp;2)</b>	This LHD implemented the Breastfeeding Sisters That Are Receiving Support (BF STARS) at different sites with low breastfeeding rates. It provided services at churches, libraries, and prenatal care offices. In addition, it used text messaging to provide support and trained lactation providers to co-provide services with the county's home visiting program. It also supported businesses to become breastfeeding-friendly, developed a broadcast public service announcement, and executed a social marketing campaign. Finally, they closed the care gap by establishing solid partnerships with two birthing hospitals to enhance referrals, and trained over 90 maternity care staff.
<b>Urban League of Detroit and Southeastern Michigan, MI</b>	This WIC office hosted several Baby Showers in the WIC clinic and on the hospital grounds, in addition to its regular breastfeeding support services. These innovative meetings included a male breastfeeding champion to present on his experience and ways to get fathers involved. In addition, it developed the Gold Ticket Program, an incentive program for mothers that continued to breastfeed. They reported increased two-week breastfeeding rates among clients following the implementation of the incentive program.

\* NACCHO granted funds for project activities in two cohorts. Cohort 1 received up to \$50,000 during the project period (January 2015 – May 2016) and Cohort 2 received up to \$50,000 during the project period (January 2016 – June 2016).

## REFERENCES

- American Public Health Association. (2013). Update to A Call to Action on Breastfeeding: A Fundamental Public Health Issue. Retrieved Nov 30, 2016 from <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/09/15/26/an-update-to-a-call-to-action-to-support-breastfeeding-a-fundamental-public-health-issue>.
- Baumgartel, K.L., Spatz, D.L. (2013). American Academy of Nursing Expert Breastfeeding Panel. WIC (The Special Supplemental Nutrition Program for Women, Infants, and Children): Policy versus practice regarding breastfeeding. *Nursing Outlook* 66, 466–470.
- Britton C, McCormick FM, Renfrew MJ, Wade A, King SE. (2007). Support for breastfeeding mothers. *The Cochrane Database of Systematic Reviews*.
- Centers for Disease Control and Prevention. (2015). National Immunization Survey. Retrieved Nov 16, 2017 from [https://www.cdc.gov/breastfeeding/data/nis\\_data/rates-any-exclusive-bf-socio-dem-2013.htm](https://www.cdc.gov/breastfeeding/data/nis_data/rates-any-exclusive-bf-socio-dem-2013.htm).
- Dunn, Rebecca, Kalich K., Fedrizzi R., Phillips, S. (2015). Barriers and contributors to breastfeeding in WIC mothers: a social ecological perspective. *Breastfeeding Medicine*, 10
- Forrestal, S., Ronette, B., Mabli J. (2015). WIC Breastfeeding Policy Inventory Final Report. Mathematica Policy Research. Retrieved Nov 1, 2016 from [www.fns.usda.gov/sites/default/files/ops/WICBPI.pdf](http://www.fns.usda.gov/sites/default/files/ops/WICBPI.pdf)
- Frey, BB., Lohmeier, JH., Lee, S.W., Tollefson, N. (2006). Measuring collaboration among grant partners. *American Journal of Evaluation*, 27, 383-392
- Hedberg, I. (2013). Barriers to breastfeeding in the WIC population. *American Journal of Maternal Child Nursing*, 38, 244-249.
- Houghtaling, B., Shanks, C. B., Jenkins M. (2017). Likelihood of breastfeeding within the USDA’s Food and Nutrition Service Special Supplemental Nutrition Program for Women, Infants and Children population. A systematic review of the literature. *Journal of Human Lactation*, 3 (1)
- Lileston, P., Nhim, K., Rutledge, G. (2015). An evaluation of the CDC’s Community-based breastfeeding supplemental cooperative agreement: reach, strategies, barriers, facilitators and lessons learned. *Journal of Human Lactation*.
- National Association of County and City Health Officials. (2014). 2013 National Profile of local health departments. Retrieved Nov 13, 2016 from [http://nacchoprofilestudy.org/wpcontent/uploads/2014/02/2013\\_National\\_Profile021014.pdf](http://nacchoprofilestudy.org/wpcontent/uploads/2014/02/2013_National_Profile021014.pdf).
- National WIC Association (2013). The Role of WIC in Public Health. Retrieved April 17, 2017 from [https://s3.amazonaws.com/aws.upl/nwica.org/WIC\\_Public\\_Health\\_Role.pdf](https://s3.amazonaws.com/aws.upl/nwica.org/WIC_Public_Health_Role.pdf)
- National WIC Association. (2016). Enhancing Breastfeeding Support in WIC: The Case for Increasing the Number of International Board Certified Lactation Consultants. Retrieved Dec 1, 2016 from <https://s3.amazonaws.com/aws.upl/nwica.org/ibclc-cc.pdf>.
- Office of the Surgeon General (US) (2011). The Surgeon General's Call to Action to Support Breastfeeding. Rockville (MD): Office of the Surgeon General (US); Centers for Disease Control and Prevention (US); Office on Women's Health (US). 2011.
- Renfrew, M. J., McCormick, F. M., Wade, A., Quinn, B., & Dowswell, T. (2012). Support for healthy breastfeeding mothers with healthy term babies. *The Cochrane Database of Systematic Reviews*, 5, CD001141.
- U.S. Department of Agriculture, Food and Nutrition Service (2010). Using Loving Support to implement best practices in peer counseling. Retrieved from [http://www.nal.usda.gov/wicworks/Learning\\_Center/support\\_peer.html](http://www.nal.usda.gov/wicworks/Learning_Center/support_peer.html).
- U.S. Department of Agriculture, Food and Nutrition Services. (2015). WIC program. Retrieved April 17, 2017 from <https://www.fns.usda.gov/wic/about-wic-wics-mission>
- U.S. Department of Agriculture, Food and Nutrition Services. (2016). Breastfeeding is a Priority in the WIC Program. Retrieved April 17, 2017 from <https://www.fns.usda.gov/wic/breastfeeding-priority-wic-program>.
- U.S. Department of Agriculture, Food and Nutrition Services. (2017). WIC Fact Sheet. Retrieved April 17, 2017 from <https://www.fns.usda.gov/sites/default/files/wic/WIC-Fact-Sheet.pdf>.
- Taren D. & Lutter C. (2017). The Role of Breastfeeding Protection, Promotion and Support in a Developing World: The Role of Breastfeeding Protection, Promotion and Support in a Developing World. *Nutrition and Health in a Developing World*. Chapter 16, 361-382.
- Vericker T. Fiscal Year 2010 WIC Food Cost report. (2013). Urban Institute. Retrieved July 7, 2017 from [https://www.fns.usda.gov/sites/default/files/WICFoodCost2010\\_0.pdf](https://www.fns.usda.gov/sites/default/files/WICFoodCost2010_0.pdf)
- Zorich, D. Waibel, G., & Erway, R. (2008). Beyond the Silos of the LAMs: Collaboration among Libraries, Archives and Museums. Retrieved Nov 1, 2016 from <http://www.oclc.org/content/dam/research/publications/library/2008/2008-05>.



## FOR MORE INFORMATION, PLEASE CONTACT THE AUTHOR:

Harumi Reis-Reilly, MS, CNS, LDN, CHES

Lead Analyst- NACCHO Breastfeeding Project

[breastfeeding@naccho.org](mailto:breastfeeding@naccho.org)

## ACKNOWLEDGEMENTS

This publication was made possible through the support from the Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity, Cooperative Agreement #U38OT000172. NACCHO is grateful for this support. Its contents are solely the views of the authors and do not necessarily represent the official views of the sponsor. Data visualization was designed by Margaret Carr, BS. Thanks to Nikia Sankofa, MPH, MPA, Sheree Keitt, MPH and Blaire Bryant, MPH for the writing support.