1. **Barriers and Facilitators of WIC Participation: Experiences of Mothers in Rural Appalachia**

Participation in WIC has been associated with favorable nutrition-related health outcomes in low-income families. Yet, WIC-eligible families continue to face a number of barriers to participation that vary based on geographic location and other factors. To date, little is known about WIC participation in rural Appalachia. The purpose of this qualitative study was to gain a deeper understanding of barriers and facilitators of WIC participation, retention, and shopping experiences in a sample of pregnant women and mothers in three rural Appalachian counties in western North Carolina. Each focus group was approximately 60 minutes long and included a series of nine open-ended questions about the overall WIC experience in rural Appalachia. A content analysis of focus group transcripts is currently underway. Findings are anticipated in January 2019. This study will contribute to a better understanding of the barriers and perceptions related to WIC participation in rural Appalachia.

**Presenter(s):**
- Sydeena Isaacs *University of North Carolina at Greensboro*

2. **Collaborating with Providers to Integrate Food Insecurity Screening into Electronic Health Records**

Medical Providers can play a critical role in connecting patients to food and nutrition resources. When health care providers assess patients for food insecurity they can help overcome stigma, increase nutrition status of patients and potentially reduce preventable health conditions. In 2016, 60 OBGYNs, Family Practitioners and Pediatricians in Tri-County Health Department (TCHD)’s jurisdiction, completed a survey to evaluate current food insecurity screening practices. As a result of this research and WIC Innovation Grant funding, TCHD is offering small sub grants and training to providers to integrate the Hunger Vital Sign™ screening tool into their electronic health records (EHR). This initial pilot demonstrates interest among providers and the feasibility of food insecurity screening integration into EHRs. The development of best practices when working with providers will create an opportunity to expand this project with future funding.<Food Insecurity Screening. Healthy Food Playbook.

**Presenter(s):**
- Melanie Morrison *Tri-County Health Department*
- Greta Macey *Tri-County Health Department*

3. **Developing the Second Century Workforce: Enhancing Skills in Public Health Nutrition and WIC**

The Guide for Developing and Enhancing Skills in Public Health and Community Nutrition was revised/recrafted by a team of representatives from the public health community, of which NWA had a representative. The competencies detailed in the document will assist WIC and Public Health staff in assessing, reviewing and/or enhancing their public health skills for working with families and/or in the community. The competencies identified in the Guide will prepare the WIC workforce for the meeting the future needs of the families we serve.

**Presenter(s):**
- Diane Moreau-Stodola *WI Department of Health Services*

4. **Enhancing WIC Clinic Environments**

Limited resources require WIC clinics to prioritize funding. High-quality nutrition education and services takes priority over improvements to clinic environments. Oregon applied for an OA Grant to focus on clinic enhancement and improvement. Funds were provided to local agencies to improve environments using a trauma informed lens and NWA branding. Welcoming and accommodating environments maintained with proper upkeep demonstrates to participants they are valued. Participants who feel valued and welcomed are more likely to return and continue to benefit from all the services WIC provides. Oregon WIC was able to fund 19 agencies in 29 locations. Participants felt welcomed and comfortable after clinic improvements. Kid friendly spaces with toys and books, welcoming staff,
and colorful clinics, and comfortable seating were common themes for what makes WIC participants feel comfortable in the clinic.

Presenter(s):
• Tiare Sanna Oregon WIC Program

5. Expanding Breastfeeding Support in a Large Urban Community
The City of Dallas WIC Lactation Care Center (LCC) is a specialty clinic that provides quality lactation care to mothers and infants. There are four Lactation Support Centers (LSC’s) in the state of Texas. The LSC’s are a unique model and are exclusive to the DSHS Texas WIC Program. Through additional grant funding, the LSCs are also able to serve mothers not eligible for the WIC Program to help broaden lactation support in Texas. In an effort to promote access to IBCLC breastfeeding support the City of Dallas opened two additional LCC locations. The goal of this new innovative concept is to provide lactation services to more mothers and infants across our community, thereby improving the health of the families we serve.

Presenter(s):
• Christine Wiseman City of Dallas WIC Program

6. Innovative Strategies to Grow Participation and Promote Retention
Nationwide WIC participation is experiencing a declining trend since peaking in 2010. The WIC program in Pender County, North Carolina has experienced increasing participation rates during the past five years. Strategies used to increase participation promote passion, purpose and progress to serve the WIC population.

Presenter(s):
• Maureen Hubbard Pender County Health Department

7. Inter-Pregnancy Weight Change in Women Participating in Minnesota WIC and Childhood Weight Status
There are limited studies examining the association of inter-pregnancy weight change (difference in the prepregnancy weights of two consecutive pregnancies) on childhood weight status at two to five years old. Even less is known about maternal weight status and the relationship between inter-pregnancy weight change and child weight. Among women who were normal weight in the first pregnancy, odds of child overweight and obesity in the second pregnancy were 27% higher among women who gained 19 or more pounds between pregnancies, compared to women who gained 0 to 18.9 pounds (Adjusted Odds Ratio (aOR): 1.27; 95% CI; 1.09-1.48), after adjusting for confounders. Women who were overweight or obese in the first pregnancy did not have higher odds of child overweight or obesity secondary to inter-pregnancy weight gain of 19 or more pounds.

Presenter(s):
• Heidi Jonson Blue Cross Blue Shield of MN

8. Maryland WIC Partners with the Community to Provide Online Breastfeeding Education Within and Beyond Maryland
In June of 2017, the Maryland Department of Health launched 15 breastfeeding education modules to prepare hospital maternity staff to provide breastfeeding education to breastfeeding mothers to increase the rates of breastfeeding in Maryland. The training (viewing of the modules and completion of each pre and post-test) meets the 15 hour didactic training required of those seeking Baby Friendly designation. Highlights of the educational program include the following: Participant knowledge level increased, with an increase in correct responses in post-test vs. pretest in 12 of the 15 modules. The program had wide ranging impact, with a range of 743 to 1400 participants completing each module over a 17 month time frame. The largest number of participants were RNs (82%) with 33% having over ten years of experience. The program has reached participants in 21 Maryland counties and in Baltimore City, 41 Maryland hospitals, and participants from 14 additional states.

Presenter(s):
• Amy Kovar Resnik Maryland Department of Health

9. Moving Past Data to Action: Engaging the Hmong Community in Minnesota
While many Minnesotans have high rates of breastfeeding initiation and duration, some cultural groups are not faring as well. Disparities in breastfeeding have a long-term impact on women's and children's health. Recent enhancements to the Minnesota WIC Information System's data has allowed MN WIC to identify the cultural groups served by MN WIC with the greatest disparities in breastfeeding rates: immigrant and second-generation Hmong. Identifying a disparity is the first step in addressing the factors which underlie it. Minnesota WIC has committed to addressing this disparity by forming an initiative in collaboration with community partners.

**Presenter(s):**

- Marcia McCoy, MPH, IBCLC Minnesota Department of Health

10. **Promoting Responsive Bottle-Feeding within WIC: Strategies to Prevent Childhood Obesity and Improve Child Retention**

The Robert Wood Johnson Foundation recently funded PHFE WIC to develop, implement, and evaluate Policy, Systems and Environmental (PSE) strategies to promote responsive bottle-feeding practices among WIC mothers, with the ultimate goals of (1) moderating risk for rapid weight gain (RWG) and obesity among WIC infants and (2) increasing child retention. Infants who are bottle-fed are at especially heightened risk for RWG, regardless of whether expressed breast milk or formula is in the bottle. Reduction of bottle usage through promotion of exclusive breastfeeding is ideal, however, despite concerted efforts to increase exclusive breastfeeding among WIC mothers, over 82% of infants on WIC in Los Angeles County (LAC) are bottle-fed by 3 months of age. In addition, bottle-fed infants are significantly less likely than breastfed infants to continue participating in WIC after formula benefits cease at 12 months. PSE interventions within WIC settings and aimed at improving mothers’ feeding practices during bottle-feeding have a unique potential to reduce health disparities, extend program participation, and benefit a significant portion of children during a critical period of development. Visit this poster to see how PHFE WIC plans to expand PSE strategies to support bottle-feeding mothers and come share your suggestions and advice as the team starts this work.

**Presenter(s):**

- Shannon Whaley PHFE WIC
- Cindy Clapp PHFE WIC

11. **Receipt-Analysis to Identify Food Purchasing Patterns Associated with Preschooler Obesity Risk in Families from Low-Socioeconomic Backgrounds**

Poor access to healthy foods and low-socioeconomic status (low-SES) increase child obesity risk. Yet, nearly 86% of preschoolers from low-SES backgrounds are healthy weight. This study examined food-purchasing patterns differentiating families from low-SES with preschoolers who were obese (OB; n=15) vs. healthy weight (HW; n=16). Families were recruited from urban, WIC clinics. 94% of families were African-American. All caregivers were female and 81% were obese. Caregivers provided receipts or self-reported food purchases weekly for 1-month. Caregivers of OB preschoolers purchased a higher percentage of food at big-box stores and fast-food restaurants than families of HW preschoolers (p<.05). Irrespective of preschooler weight status, nearly half of purchases were made at grocery stores/food markets. Child weight status did not differentiate monthly per person expenses overall or at any food purchase location type. Food-receipts may offer unique insights into purchasing patterns and child obesity risk in low-SES populations.

**Presenter(s):**

- Elizabeth Towner Wayne State University

12. **Streamlining WIC: Increasing Participation and Decreasing Short Certifications through the use of IntakeQ**

This poster will provide an overview of the Greater Baden Medical’s WIC Program project whose objective was to streamline WIC certification through the implementation of intake process which verifies proof of address and income prior to the WIC appointment. This poster will share the objectives, activities and results from the project and will also describe lessons learned and tips for other agencies that want to implement these practices. GBMS WIC was a part of the Streamlining WIC Project with technical support provided by the Center on Budget and Policy Priorities and Altarum. As a
result of this project we were able to identify and implement strategies for making WIC services more accessible and to simplify the certification process for applicants and staff.

Presenter(s):
- Jacqueline Melton Greater Baden Medical Services WIC

13. Sustaining Breastfeeding in the ‘4th Trimester’: The Role of WIC Peer Counselors
The ‘Fourth Trimester’ refers to the transition period after childbirth when infants and their mothers are adjusting to their new lives. Significant biological, psychological, and social changes occur during this period and many mothers have difficulty transiting to this new time in their lives. Mothers should be able to rely on their providers for breastfeeding support and assistance throughout their breastfeeding journey. WIC Breastfeeding Peer Counselors play a unique role in providing education and support to families. This poster describes presents concrete strategies WIC Peer Counselors can employ to keep mothers engaged with breastfeeding during the Fourth Trimester.

Presenter(s):
- Irene Zoppi Medela LLC

14. Telelactation Use And Breastfeeding Outcomes Among Mothers Participating in the Women, Infant, and Children Program In Mississippi: A Retrospective Cohort Study
The use of “telelactation” programs, which provide access to lactation consultants via video conferencing on smartphones, is a potential solution to increase access among low-income women. Between June 2016 and May 2018, women enrolled in the Mississippi WIC program were provided the opportunity to freely download the Pacify “telelactation” application which provided 24-hour access to video lactation consultations via smartphones. A retrospective cohort study compared rates of any breastfeeding and exclusive breastfeeding at three and six-months with logistic regression. Women downloading the Pacify application had significantly higher rates of any breastfeeding at three months (odds ratio [OR] 1.74, confidence interval [CI] 1.50-2.03) and six months (OR 2.01, CI 1.71-2.36) and exclusive breastfeeding at three months (OR 2.47, CI 2.09-2.92) and six months (OR 2.06, CI 1.64-2.59) even after controlling for confounding demographic factors. The results indicate that telelactation applications may improve breastfeeding and should be considered by policy makers.

Presenter(s):
- Aaron Hunt University of Nevada, Las Vegas

15. The Association Between the 2009 WIC Food Package Change and Decreased Obesity Risk Among WIC-Participating Children in Los Angeles County is Partly Driven By Increased Breastfeeding
Focusing on WIC-participating children in Los Angeles County in 2003-2016, the goal of this study was to determine if the type of infant food package received after the 2009 WIC food package change explained a previously established association between receiving the new food package and a decreased obesity risk at age 4 years. WIC participating children (0-4 years) were grouped into receiving either the new food package (2010-2016) or the old food package (2003-2009). Based on the type of infant package received from 0-12 months, children were further classified as: fully breastfed, mostly breastfed, mostly formula fed, or fully formula fed. An increase in breastfeeding was observed among children in the new food package. Those who were fully breastfed in the new food package showed significantly lower obesity risk compared to the other groups. In conclusion, the decrease in obesity risk previously observed is partly explained by increased breastfeeding.

Presenter(s):
- M. Pia Chaparro Tulane University

Purpose: While all WIC state agencies (SAs) allow participants to purchase organic fruits and vegetables with the cash value benefit, WIC SAs have the option to allow or restrict other organic food items on their food lists. The purpose of this study is to explore trends in the price differential between organic and conventional WIC-eligible food items. Using the USDA Agricultural Marketing Service’s (AMS) Weekly Retail Organic Price Comparison report, we have examined the historical prices for four food
categories (milk, cheese, eggs, and yogurt) and analyzed the percentage premium price of organic foods compared with their conventional counterparts. Conclusions: Knowing whether historical data support the notion that organic food items are more expensive than conventional food items may help SAs make decisions as they revise and update their food lists over time. It may also help SAs who educate WIC participants about non-fruit and vegetable organic food items.

**Presenter(s):**
- Hilary Wagner Insight Policy Research
- Denise Bellows Insight Policy Research

17. Use of Electronic and Social Media in Breastfeeding Support: Perceptions of Peer Counselors
The Minnesota Special Supplemental Nutrition for Women, Infants and Children (WIC) Peer Breastfeeding Support Program has a history of reducing disparities in breastfeeding outcomes among participants. Text messaging is an emerging method for contacting clients successfully and reaching underserved populations. Concerns about data privacy have led to policies restricting texting by employees. The aim of this qualitative study was to understand: What modes of communication clients prefer to use, and why How different modes of communication affect the quality of breastfeeding support What concerns peers, managers and clients have regarding confidentiality when using mobile communication

**Presenter(s):**
- Patricia Faulkner Minnesota Department of Health

18. Vermont WIC’s Multi-Pronged Approach to Increase Food Redemption Among Participants with Limited English Proficiency
For those new to WIC, especially those with limited English proficiency (LEP), shopping for WIC foods can be complicated. In Vermont, families with LEP redeem foods at lower rates than those with English proficiency. To address this issue, Vermont WIC created short shopping videos and print materials in multiple languages. The videos are sent via text to new participants and used in clinic. To further support food redemption among participants with LEP, we are also taking steps to authorize our first ethnic market as a WIC grocer. Additionally, we are developing a program that matches new families with LEP with paid “Shopper Helpers.” Shopper Helpers speak the same language as the family and will be trained to walk through the first shopping trip. This presentation will describe these strategies in detail including how successfully they were implemented, lessons learned along the way, and how we plan to evaluate their effectiveness.

**Presenter(s):**
- Amy Malinowski Vermont Department of Health
- Madeline Buckley Vermont Department of Health
- Jenna Cloutier Vermont Department of Health

19. WIC Eligibility and Participation: A Visual Exploration
To be eligible for WIC, women, infants, and children must meet categorical and income eligibility requirements and be at nutritional risk. This poster examines how some eligible groups participate in WIC at higher (or lower) rates than other groups, and explores differences by State through a series of visualizations. Estimates of WIC eligibility and coverage rates are based on data in the CPS-ASEC combined with administrative data on WIC participation. --13.9 million individuals were eligible for WIC in 2016.--Almost half of all WIC-eligible individuals did not participate.--Eligible children were least likely to participate (44 percent).--Coverage rates varied substantially by State. These estimates identify the eligible groups that are most and least likely to participate in WIC and illustrate the wide variation in coverage rates across States. The estimates help FNS measure WIC program performance and identify groups and States where there are potential unmet nutritional assistance needs.

**Presenter(s):**
- Carole Trippe Insight Policy Research

20. WIC Food Allergy Data: What Can We Learn?
WIC Food Allergy Data: What Can We Learn?
Food allergies are a growing public health concern affecting 4-6% of children in the US. The WIC program provides an important perspective on the magnitude and distribution of food allergies for children up to 5 years old. These data can prepare WIC clinics, childcare settings, preschools, schools and communities to respond to potentially life threatening emergencies. Although WIC data on food allergies are self-report, WIC is the largest and often the only source of data on early childhood food allergies.

Presenter(s):
- Aphrodite Hitzidou University of Minnesota