



Western MCH Nutrition Leadership Network

*New Year, New Partners, New Tools:
Strategies for Promoting Health in Youth*

Abstracts

**February 2nd and 3rd, 2017
Crowne Plaza Hotel, Redondo Beach, California**

Table of Contents

WIC Technology Initiatives

Electronic Food and Formula Authorization.....	3
Texting for Retention of Colorado WIC Participants	4
Kona Teledentistry Pilot Project	5

Rural Food Security

Working with Rural Alaskan People to Develop Nutrition Education Materials Encouraging Use of Nutrient Dense Wild Local Plants.....	6
Improving Access to Fresh Fruits & Vegetables and Nutritious Food During Summer	7

WIC/CACFP Participation

Strategies to Increase Participation in the Colorado Child and Adult Care Food Program	8
Participant in the Montana WIC Program.....	9
Wyoming WIC Child Recruitment and Retention.....	10

WIC Nutrition Education

Impact of Interventions Containing a Cooking Component on Adult Dietary Intake and Health: A Systematic Review	11
Targeting Behavioral Triggers of Overfeeding in Older Infants and Toddlers (AZ TOTT).....	12
Improving Wyoming WIC Staff Knowledge and Skills in Nutrition and Breastfeeding Education and Counseling	13

Pediatric Obesity Mini-Collaborative Improvement & Innovation Network (CoIIN)

California Pediatric Obesity Mini-Collaborative Improvement & Innovation Network (Mini-CoIIN) .	14
Oregon’s Pediatric Obesity Mini Collaborative Improvement and Innovation Network (CoIIN)	15

WIC Breastfeeding Promotion

Breastfeeding Friendly Washington Program (BFWA).....	16
Improving Breastfeeding Rates, Education, and Access to Supportive Resources	17
Wyoming WIC Breastfeeding Peer Counselor Program	18

Children with Special Healthcare Needs

Autism Spectrum Disorder Knowledge and Experience among Low-Income Parents Attending WIC	19
------------------------------------------------------------------------------------------	----

Electronic Food and Formula Authorization Form Pilot

Background & Project Goals:

In 2013 the Utah State WIC Office received a number of complaints about the current Food and Formula Authorization Form (FAFAF) process, saying that they were receiving many incomplete FAFAFs from physicians. The State Office collected data from 10 of our clinics and found that 6 out of the 10 clinics had 100% of their FAFAFs received incomplete or missing important information. This put an extra burden on both staff and participants. It required an extra 27.67 staff hours (for a total of \$8,799.00 annually) as well as 21 additional appointments. Participants also had the burden of waiting a longer amount of time to receive formula for their infants.

From this data, it was decided to implement an electronic FAFAF procedure. Utah WIC partnered with Utah Health Information Network (UHIN) to make this come to fruition. UHIN already provided a secure computer application for Utah physicians for transmission of health information called cHIE Direct. They agreed that this would be a good platform for Utah physicians to easily access, complete medical formula orders, and submit as an electronic FAFAF to their patients' WIC clinics.

Summary/Discussion:

The pilot for this electronic FAFAF is has just started in Salt Lake County. Intermountain Health Care (IHC) in Salt Lake City volunteered to Pilot. IHC is a not for profit integrated health system that serves a large number of people in Utah, including 22 hospitals, 185 clinics, and 1,400 primary and secondary care physicians. Utah WIC and UHIN worked with Intermountain Health Care to create the correct form. This form is filled out by physicians, signed electronically, and submitted to the participant's clinic as a pdf via email. Although this pilot is just starting we have heard positive feedback from local WIC clinics and physicians. We are excited to see how this will impact WIC participants and their families.

Texting for Retention of Colorado WIC Participants

People involved: Colorado Department of Public Health and Environment WIC and Health Survey and Evaluation Branch staff.

Background/Introduction

Participation in the Colorado WIC Program has decreased since 2009; nearly 50 percent of enrolled infants leave before they turn two years old. In 2015 Colorado WIC was awarded a WIC Special Projects mini-grant from the US Department of Agriculture to implement an innovative Texting for Retention Program (TFRP) pilot, implemented from May 8, 2015 to May 31, 2016.

Project Goals:

The project had two main goals, to determine if:

- 1) appointment text reminders reduced missed appointments, and if so, subsequently decreased voluntary termination
- 2) retention further increased by sending a text message prompt outlining the benefits of WIC and information on how to continue participating on the program.

Methods:

Fifteen WIC clinics were selected for the pilot based on their size and type of scheduling (standard, or same day/next day). Clinics were assigned to one of three separate groups: control, basic innovation (participant received appointment reminders by text), and augmented innovation (participants received both appointment reminders and information about WIC benefits by text.) Enrollment was tracked for one year (June 2014 to May 2015) to establish a baseline prior to implementation of texting.

Results:

The total number of vouchered participants declined slightly for all three groups in the baseline year. In the pilot year the control and basic innovation groups continued to have a slight downward trend, (6.7% and 2.7% respectively) but the augmented innovation group experienced an increase (1.9%) in average monthly enrollment.

Summary/Discussion:

Although the change in the trend between the baseline year and pilot year for control and basic innovation groups was not significant, the change for the augmented group approached significance (p-value 0.12). The results imply that texting innovation had a positive effect on enrollment in the augmented innovation group, and Colorado WIC implemented state-wide augmented texting January 2017.

Submitted by:

Kathleen Baker, RD, MS, MPH

Colorado Department of Public Health and Environment
Prevention Services Division

Kona Teledentistry Pilot Project

Partners: Paul Glassman, DDS, MA, MBA, University of the Pacific (UOP), School of Dentistry; Donna Altshul, BS, RDH, West Hawaii Community Health Center (WHCHC); Andrew Tseu, DDS, JD, DOH Development Disabilities Division (DDD), Hospital & Community Dental Services Branch (HCDSB); Kona WIC Unit, Hawaii District Health Office (HDHO), DOH.

Background & Project Goals: Dental caries are the most common chronic health problem in children, five times more common than asthma. Untreated dental decay and early tooth loss can compromise a child's ability to eat and learn, cause pain and infection, impair speech development and seriously affect health and well-being. Early preventive screening, diagnosis and treatment at a dental home are key. The Pew Foundation consistently rates Hawaii as the worst state for oral health in the nation, meeting only one of the eight policy benchmarks at improving children's oral health. Hawaii was recognized for having over 45% of Medicaid-enrolled children receive dental services in 2009.

The DOH has identified significant disparities in accessing oral health services for the underserved and vulnerable populations. Factors influencing these disparities include:

- The geography of the Hawaiian Islands exacerbates access to oral health services which are unevenly distributed with most dentists, dental specialists, and resources for sedation and anesthesia for dental care concentrated on the island of Oahu.
- Hawaii's community water is un-fluoridated, apart from military bases.
- A limited number of dentists participate and accept patients eligible for the State Medicaid Dental Program.
- There is no dental school in the state.
- Hawaii has a large immigrant as well as ethnically diverse population.

The DOH used funding from the Hawaii Dental Service (HDS) Foundation to establish a teledentistry pilot project starting in Kona (on the west side) on the island of Hawaii. The Virtual Dental Home (VDH) system was developed by the Pacific Center for Special Care at the UOP School of Dentistry as an effective way to provide services for three family populations in Kona: WIC, Head Start, and Tutu & Me Traveling Preschool. Upon an executed Memorandum of Agreement (MOA), non-dentist oral health professionals provide screening, digital x-rays, photographs and electronic charts shared via the internet with a licensed dentist to determine a treatment plan. Oral health professionals from the WHCHC started servicing Kona WIC families in September 2016 using teledentistry, a stepped up service from the long-standing successful collaboration with WIC Keiki Days where a knee-to-knee assessment, anticipatory guidance and fluoride varnish were provided. Since inception, 140 children have been assessed at the twice-a-week sessions at WIC. Head Start families in Kona started receiving the teledentistry services in October 2016. The MOA with Tutu & Me has not yet been executed. Three other states (Colorado, California and Oregon) currently use the VDH system.

Results: Plans are to track outcomes such as untreated decay, urgent dental care needed, referrals to dentists/clinic. Collaborations such as the teledentistry project should contribute to lower costs. Data on the costs of flying children and accompanying adults from Kona to Oahu for dental care show a steady decline from 419 children at a cost of \$142,038 in State Fiscal Year 2012 to 322 children at a cost of \$110,583 in SFY 2014 to 12 children and 5 adults at a cost of \$5,780 in SFY 2016 (Community Case Management Corporation).

Summary/Discussion: While the pilot project has not been formally evaluated yet, the partners are hopeful to secure funding to implement similar projects in other underserved areas.

Improving Access to Fresh Fruits & Vegetables and Nutritious Food During Summer

Leads: Jacquelyn Bonde, MPH (WIC FMNP) and Leah Baker (SEBTC)

Background:

Nevada has been working to improve access to fresh fruits and vegetables and food during the summer. Much of Nevada is Rural and Frontier communities and many of the Nevada WIC participants in these rural/frontier areas live in food deserts and struggle to obtain healthy, fresh food.

Goals:

- Improve access and consumption of fresh fruits and vegetables of WIC participants
- Improve access to food for children during summer when school meals are not available

Methods

Fresh Fruits & Vegetables – Received 1st WIC Farmers Market Nutrition Program (WIC FMNP) grant in 2016. Nevada was awarded \$285,000 in food monies in July with coupon issuance in six counties (19 WIC clinics). Participants received coupon booklets of \$30 each.

Summer Food – Conducted the Summer Electronic Benefit Transfer for Children (SEBTC) program. Nevada WIC received \$1,569,420 in USDA grant monies for food benefits which provided \$30 - \$60 of WIC benefits to school-aged children (ages 5-18) who qualified for free-and-reduced meals. Covered June-July-August. Was expanded in 2016 to serve all rural Nevada counties, to meet the “gap” when school meals are not available in the summer. Eligible foods also included \$8 - \$16 worth of fresh fruits & vegetables.

Results

WIC FMNP – 6,120 participants were issued coupon books and there was a 45% redemption rate at local farmers markets. Post-surveys showed high participant/clinic ratings and an increase in fruit and vegetable intake among WIC FMNP participants.

SEBTC – 11,942 households were served and there was a 72% redemption rate.

Working with Rural Alaskan People to Develop Nutrition Education Materials Encouraging Use of Nutrient Dense Wild Local Plants

People Involved: Jennifer Johnson, State of Alaska WIC Program; Kathleen Wayne, State of Alaska WIC Program; Marylynne Kostick, State of Alaska Department of Fish and Game. Division of Subsistence; Andrea Bersamin, University of Alaska, Fairbanks, Center for Alaska Native Health Research

Background/Introduction:

Alaska has over 200 villages, most located off the road system and accessible only by boat or plane. Their interests and needs are not the same as urban communities. People in villages are actively involved in harvesting nutritionally dense wild foods- through hunting, fishing and gathering. The SNAP Program (formerly called Food Stamps) allows the purchase of subsistence hunting/fishing gear to harvest wild foods in some parts of rural Alaska. The option to use SNAP for subsistence gear has not been assessed, and the impact of SNAP funds on wild food procurement and household food security remains unclear. To partner with this effort, WIC set out to develop nutrition education materials that support use of wild foods- and because plant foods fit well into WIC recommendations, we focused on plants.

Goals:

The Alaska Department of Health and Social Services and the Division of Subsistence, Department of Fish and Game conducted a pilot project surveying rural Alaska households' participation in subsistence activities, use of SNAP to purchase gear, and the impacts of the program on food security. Education materials were developed which promoted wild food sources from the region and are based on the nutrition education interests of the local residents.

Methods:

Working with University of Alaska, Fairbanks Center for Alaska Native Health Research, and communities in Western Alaska, graduate students worked with elders and other key informants in Western Alaska to determine their interests and what type of education they would prefer. Several modalities were used, including card sorts and focus groups, which took place in local rural communities.

Results:

Evidence based culturally relevant nutrition education modalities, including brochures, cooking demonstration videos and text messaging were developed and featuring locally available nutrient dense foods. These materials are in the process of being evaluated.

Summary/Discussion:

Evidence based culturally relevant nutrition education modalities, including brochures and cooking demonstration videos were developed that feature locally available nutrient dense foods from Western Alaska. Once evaluation is complete, we would like to expand to other areas of Alaska and develop similar materials which focus on their local foods and interests.

Strategies to Increase Participation in the Colorado Child and Adult Care Food Program

Project lead: Meghan George-Nichols, RD, LD, CLC,

Background Information and Project goals:

In 2013, the Colorado Child and Adult Care Food Program (CACFP) identified the need to place intentional focus on increasing program participation by afterschool at-risk programs and adult day care. In 2014, the CACFP team organized the outreach team. The team identified targets and strategies to increase the number of participating afterschool at-risk and adult day care sites.

Methods:

The team used the performance management model *The 4 Disciplines of Execution* to develop and assess strategies. “Wildly important goals” (WIGs) were identified and used to help focus team activities. Historical program data was used to set the overall WIG. The team then assessed current activities and partnerships to define team specific WIGs. The team also compiled a list of potential partnerships, both internal and external, to explore. To track process and keep the team engaged, three visual scoreboards were developed.

Results:

After the first 12 months of tracking and documenting the outreach team’s progress, the team determined that number of sites participating was not a viable evaluation tool and determined the number of meals claimed was a stronger measure. The team also felt that child care centers should be included in the overall WIG. For the subsequent years the overall WIG has been to increase the number of meals served in child care and afterschool at-risk programs. The team is still measuring number of adult day care sites because of the small eligible population. Through strategic partnerships the Colorado CACFP has successfully increased participation since 2014.

Participant in the Montana WIC Program

Team: Alaine Broadaway, PhD, Epidemiologist; Blair Hendricks, IT Lead WIC

Introduction: Participation in the WIC program has been declining not only in Montana but in the United States. Montana WIC has seen a decline of about 8.4% in the last 5 year(s). Montana has continually worked on our outreach efforts in our state by completing a yearly outreach campaign. These campaigns can be social media (facebook), truck signs, gas pop tops, etc.

The next step was to determine a method of determining our potentially eligible population. Our epidemiologist worked closely with WIC's IT to pull data that would benefit this process. Once these criteria were produced and used, we compared our potentially eligible with our current participation to see if we, as a state, were reaching all eligible populations in Montana.

Goals:

- Determine our potentially eligible population
- Compare our potentially eligible to our actual participation

The methods, results, and summary is related just to our infant population for this abstract.

Methods: All infants under 1 year old who are enrolled in Medicaid are eligible for WIC. While this adjunctively-eligible population does not represent all WIC-eligible infants, it does offer insight into what demographic factors might predict WIC participation.

Determining WIC adjunctively eligibility and enrollment required two levels of record linkage. Via probabilistic record linkage, we matched birth record data from 2012-2014 with: 1) Medicaid claims data on infants born in 2012-2014 and were enrolled in Medicaid during their first year of life, and 2) infants in WIC who were born in 2012-2014 and were certified before their first birthdays.

Once record linkage was complete, we compared demographic information on infants who were enrolled in Medicaid but did not enroll in WIC with who enrolled in both programs.

Results: In all, we identified 20,392 infants with matched birth record and Medicaid claims data. Within those populations, we identified 14,048 who were enrolled in WIC (69% of the adjunctively eligible population). From 2012 to 2014, the number of infants enrolled in Medicaid has increased, but the percent of those infants who actually enroll in WIC have decreased from 71.2% to 66.3%.

Infants who were enrolled in WIC were more likely to have a mother who was American Indian/Alaska Native, overweight or obese, younger, unmarried, and have lower educational attainment. Odds of WIC enrollment have decreased each year.

Summary: Our adjunctive eligibility linkage project indicates that nearly one in three adjunctively eligible infants in Montana was not enrolled in WIC, and that the rate of enrollment is decreasing annually. Populations with the lowest rates of infant enrollment into WIC were white, married, older mothers with an undergraduate degree or higher, and who had a normal BMI before pregnancy. Montana WIC will investigate campaign strategies that will target the populations with lowest WIC enrollment rates.

Wyoming WIC Child Recruitment and Retention

Staff Involved: Janet Moran, WIC Program Manager; Danae Olson, Wyoming WIC Program Nutrition Coordinator

Background:

According to USDA 2011-2013 data, Wyoming WIC served an estimated forty-five percent of eligible children. Research indicates that participants and community partners are unaware that the program serves children past infancy and are not familiar with WIC services. Since the majority of Wyoming WIC participants find out about WIC through family/friends or a healthcare professional it is important to reach these networks with accurate information about WIC.

Project Goals:

Improve Wyoming WIC child retention beyond the first birthday through community partner outreach and participant education regarding WIC services for children ages one to five.

Methods:

To develop a statewide outreach plan, Wyoming WIC regional supervisors selected outreach tools and message delivery methods by reviewing methods successfully used in other states.

Results:

This project expands uses of outreach tools utilized by Illinois WIC. The following activities will be conducted: Wyoming WIC materials will be updated to include a “WIC to 5” logo. WIC posters/fliers with “WIC to 5” and benefits of WIC participation will be provided to community partners. Birthday cards with “WIC to 5” will be provided to children at their 1 year birthday. Provider education booklets will be distributed to medical and childcare providers. Small cards and prescription pad with the WIC phone number and “WIC to 5” will be provided to clients and community partners.

Measure of Impact:

The impact of outreach efforts will be measured by: monthly monitoring of caseload and comparing the prior year’s caseload, taking into account seasonal variances in participation; documentation of outreach activities in each Wyoming County; monitoring of annual WIC participant survey results; feedback from community partners through established community meetings.

Impact of Interventions Containing a Cooking Component on Adult Dietary Intake and Health: a Systematic Review

Marla Reicks, PhD, RD, Megan Kocher, MLIS, **Julie Reeder, PhD, MPH, CHES**

Department of Food Science and Nutrition, University of Minnesota, Library Science, University of Minnesota Libraries, **State of Oregon WIC Program**

Background: The perception that improvement of cooking skills will lead to increased home food preparation and therefore lead to better diet quality, and improved health and weight status among adults, is based on findings from several recent literature reviews. However, non-rigorous study designs, varying study populations, and use of non-validated assessment tools were noted as factors that limit the strength of these positive perceptions. With increased interest in cooking related interventions by Accountable Care Organizations and clinical providers, a clearer understanding of the potential impact of these interventions is needed.

Objective: The purpose of this study was to review the effectiveness of interventions that included a cooking component from 2012-2015 on diet and health outcomes among adults.

Methods: The review protocol is registered on PROSPERO (CRD 42016036081). The search period was from January 1, 2011 to March 3, 2016. Searches were performed in four electronic databases; MEDLINE, Agricola, Web of Science, and the Cochrane Central Register of Controlled Trials – for articles related to cooking interventions and diet- or health-related outcomes. Search terms included items such as “cooking,” “cooking,” “food preparation,” “self-efficacy,” “health knowledge, attitudes, practice,” “diet,” “eating,” “health promotion,” “dietary habits,” “dietary outcome,” “food habits,” “food intake,” and “eating patterns.” Initial screening by title and abstract was performed using a reference management program – RefWorks – and was split amongst the three authors so that two researchers screened each reference. For studies selected through the initial screening, full-text articles were obtained for further evaluation. Again, the articles were distributed amongst the three authors so that two people read each article and assessed its fit to the inclusion criteria outlined in the study protocol. The selected articles were also given a quality rating of positive, negative, or neutral based on the Academy of Nutrition and Dietetics Evidence Analysis Library’s quality criteria checklist for primary research.

Results: After removing duplicate articles 2,365 abstracts were reviewed to determine their match to inclusion criteria. Of those, 91 articles were of sufficient fit to receive full article review. Fifty-seven were excluded for reasons such as not being intervention studies or having an inadequate description of the cooking component. A total of 34 manuscripts were selected for full extraction and quality assessment. Twenty-one studies did not specify a theoretical basis for the intervention. Of those that did specify a theoretical framework, social cognitive theory, stages of change, self-efficacy, and adult learning were most frequently mentioned. However, it was not always clear in the manuscript how the theory was incorporated in to the structure of the intervention or the evaluation and interpretation of results. Twenty studies included some sort of hands-on cooking experience as part of the intervention. Eight included cooking demonstrations only. The most common study design was a single group, prospective cohort. A control group was absent in the majority of studies. Participants most often self-selected their participation and in one study that did have an intervention and control group, participants were allowed to select which group they would like to be assigned to. Impact of interventions were primarily measured quantitatively through dietary recall, knowledge questionnaires, and biochemical markers. For many studies, the validity of the survey instruments were not sufficiently demonstrated. The most common outcomes of interests were changes in fruit and vegetable intake, total calorie intake, or intake of specific nutrients.

Discussion: Although positive trends were noted for selected outcomes such as fruit and vegetable consumption, other outcomes were mixed. Prevalent methodological issues such as small sample size, less rigorous study designs, self-reported outcomes, and the use of non-validated measurement scales limit the strength of these positive findings. Furthermore, the lack of validity and limited consistency between studies does not allow conclusions to be made as to which components of a cooking related intervention would be essential to maximize dietary or clinical impacts. In short, more methodological rigorous studies of cooking-focused interventions, particularly those conducted outside of clinical settings are needed to more confidently determine the impact of these interventions on dietary behaviors, biochemical indicators, and potential role in the reduction of healthcare costs.

Targeting Behavioral Triggers of Overfeeding in Older Infants and Toddlers (AZ TOTT)

People involved in project and their organizational affiliation: Dr. Jane Heinig, Executive Director and staff from the Human Lactation Center, University of California Davis, and Linda Yee from Arizona Department of Health Services

Background/Introduction:

Arizona would like to use the revised messages and materials from the California TOTT Study as a continuation of the Baby Behavior curriculum to help WIC staff provide appropriate counseling to caregivers of toddlers. They will learn about the behavioral triggers of overfeeding and/or inappropriate feeding in older infants and toddlers, understand the six “big changes” affecting feeding, child behaviors influencing parents feeding decisions and curriculum-specific communication techniques. We will evaluate the effectiveness of extending the intervention in promoting optimal child feeding and keeping children at a healthy weight in each of the participating intervention clinics. We hope that improving our counseling will improve infant feeding practices, keep toddlers ages 6 – 18 months at a healthy weight, and retain participation, as parents will have a better nutrition education experience and more information targeted to their individual needs.

Project Goals:

The TOTT study was designed to examine the added value and effectiveness of extending the Baby Behavior Curriculum, to include messages and revised materials related to the behavior of older babies and toddlers up to 18 months in promoting optimal infant feeding and decreasing the development of childhood obesity.

Methods:

The Arizona WIC program recruited four (4) WIC clinics to participate in this project. Two (2) clinics will continue the Baby Behavior Curriculum throughout the study period as our control, and the other two (2) WIC clinics will continue Baby Behavior Curriculum and receive additional training in providing TOTT Study messages to WIC participants.

Results/ Summary/Discussion:

Preliminary results are encouraging in the participating clinics. It has become evident that even though the LMS courses provide a learning foundation for the Baby Behavior curriculum, follow-up and support in the clinic environment are critical to staff learning to apply the concepts of Baby Behavior. Final results will be provided on January 24 to Arizona staff.

It is the intent of the Arizona WIC Program to develop an on-line course and training guidebook on TOTT within the next two years.

Improving Wyoming WIC Staff Knowledge and Skills in Nutrition and Breastfeeding Education and Counseling

Staff Involved: Janet Moran, WIC Program Manager; Danae Olson, Wyoming WIC Program Nutrition Coordinator

Background:

Wyoming WIC staff providing nutrition and breastfeeding education and counseling are Registered Dietitians, Registered Nurses, or Nutritionists with a minimum bachelor's degree in nutrition or nursing. These staff are collectively referred to as Certified Professional Authorities (CPA) and perform nutrition assessments, identify nutritional risk factors, and provide education and counseling. Wyoming WIC provides ongoing training in order to have consistent nutrition and breastfeeding messaging statewide.

Project Goals:

Improve Wyoming WIC staff knowledge and skills in nutrition and breastfeeding counseling and education through in-person trainings.

Results:

Wyoming WIC has completed trainings in the past year to increase WIC CPA's skills and knowledge. Trainings Include: Ellyn Satter's Division of Responsibility (sDOR) and the Satter Eating Competence Model (April 2016); Motivational Interviewing (April 2016, October 2016); Baby Behavior (October 2016). Planned trainings include: Baby Behavior and Breastfeeding (May 2017).

Clinic observations and staff discussions indicate that Wyoming WIC CPAs incorporate messaging regarding Baby Behavior and sDOR during client interactions. Staff are becoming more comfortable in utilizing motivational interviewing. Ongoing discussions of these concepts are included in regular staff conference calls. In addition, staff observation and record review forms have space to assess use of motivational interviewing, Baby Behavior, and sDOR.

Summary/Discussion:

On-going training supports continued professional development; however, training and travel is dependent on available funding. Wyoming WIC State staff are currently revising CPA training and are identifying training opportunities for new staff. Staff will have opportunities to provide feedback on training needs through surveys and discussions. In-person Breastfeeding and Baby Behavior training in 2017 will be possible due to a Breastfeeding Bonus Award.

California Pediatric Obesity Mini-Collaborative Improvement & Innovation Network (Mini-CoIIN)

People involved: The CA mini CoIIN's core members include Children's Council of San Francisco; the Maternal Child and Adolescent Health (MCAH) Division and Nutrition Education and Obesity Prevention Branch (NEOPB), CA Department of Public Health (CDPH); CA Emergency Medical Services Authority (EMSA); and the University of CA, Davis (UCD), Human Lactation Center. Other team members represent the CA Department of Education (CDE); Nutrition Services Division, Child Care Training Unit, CA Department of Social Services Child Care Licensing Program-Policy Unit; First Five CA, and MCAH Local Health Jurisdiction (LHJ) Programs.

Background: In 2016, California (CA) was of 1 of 6 states to join the Association of State Public Health Nutritionists (ASPHN) and several national partners in a Pediatric Obesity Nutrition Mini Collaborative Improvement and Innovative Network (CoIIN). The aim of the CA mini CoIIN is to use Plan-Study-Do-Act (PDSA) quality improvement process to promote policies and practices that support behaviors to increase the proportion of children ages 0-5 years that fall within a healthy weight range. The activities of the mini CoIIN align and support the State's Title V Block Grant.

Methods: Beginning January 1, 2016, CA law requires one hour of nutrition training based upon the standards developed and approved by Emergency Medical Services Authority (EMSA) for new licensees of child care homes and centers. An EMSA web page is used by training instructors and child-care providers to meet these standards. The core CA CoIIN project goal is to update and expand child-care resources on the new EMSA Nutrition training web page to 1) increase breastfeeding, 2) improve nutrition, 3) increase quality physical activity and 4) reduce screen time.

Results: To revise the EMSA Nutrition webpage the mini CoIIN team 1) incorporated team member's lessons learned, and 2) completed technical review of resources. In addition to researching National and CA materials, the team reviewed: 1) research-based best practices of the Children's Council of San Francisco Healthy Apple Program, 2) CDE's Farm to Preschool program, 3) the CA Early Care and Education (ECE) Partnership's model nutrition and physical activity policies, 4) formative research on child nutrition in child-care sites by the UCD, Human Lactation Center, 5) existing EMSA standards for the mandated newly licensed child-care provider nutrition training; and 6) MCAH LHJs child-care nutrition and physical activity projects.

A mid-course evaluation showed that mini-CoIIN members found the collaboration to be valuable though time commitments were difficult.

Summary/Discussion: Many California State-wide organizations are involved in promoting nutrition and physical activity within childcare sites. Having a new law that requires a set nutrition curriculum is unique and motivational for bringing a new expert group together to collaborate. Childcare work by Local Health Jurisdiction MCAH programs is limited to 5 counties, but their work and enthusiasm may expand interest.

Oregon's Pediatric Obesity Mini Collaborative Improvement and Innovation Network (CoIIN)

Robin Stanton, M.A., R.D., L.D. Nutrition Consultant, Maternal and Child Health Program and WIC Program, Center for Health Promotion and Disease Prevention, Oregon Health Authority

Background: The CoIIN has the overarching goal of improving healthy weight in early childhood through changes to state early care and education (ECE) systems. State teams are engaged in a quality improvement process using PDSA cycles to support and enhance work on the DP13-1305 strategy of improving nutrition and physical activity in ECE settings. Obesity prevention standards from CDC's Spectrum of Opportunities for Obesity Prevention is the guiding framework.

Project Goal: Identify disparities in CACFP enrollment through a gap analysis of low CACFP area participation rates respective to the number of providers and centers, and income levels. Target training of licensing and quality improvement specialists and provide outreach materials to increase CACFP enrollment to support healthy weight and development for children in care in vulnerable communities.

Methods: Development of the CoIIN followed the Breakthrough Series model from the Institute for Health Improvement (IHI). The Oregon Public Health Division (PHD) team members identified the aim, recruited team members from Oregon Department of Education Child Nutrition Program (CNP), and the Early Learning Division (ELD), participated in monthly learning sessions with other state teams, and developed a plan to conduct Plan-Do-Study-Act (PDSA) cycles. Key activities:

- Build on partnerships that have been developed between PHD, CNP and ELD.
- Leverage work performed through Quality Rating Improvement System (QRIS), child care licensing, 1305, and child care rules revision.
- Leverage partnerships to develop robust data sharing across agencies in order that gap analysis can be performed. Gap analysis uses CACFP, child care and census data. Upon completion, conduct PDSA cycles to target child care center(s) for outreach.
- Develop website for outreach to child care providers, and licensing and quality improvement specialists. Translate outreach website into other language(s).
- Provide outreach and training/onboarding about CACFP to licensing specialists and quality improvement specialists in order to reach underserved communities.

Results

- Partnerships strengthened with team member's organization. The CACFP and ELD teams held a joint meeting to facilitate shared activities across the programs in order to provide seamless services for children, families and providers.
- Leveraged partnerships: team members participated in a QRIS "solution session" and child care rules revision for health and safety standards.
- Data shared across 2 divisions; ELD is working towards incorporating CACFP data.
- Website for outreach is under development to target underserved communities.
- Conducted a survey of 102 child care centers to assess value of CACFP; licensing specialists received training and resources about CACFP.

Summary

Through a collaborative and innovative team process Oregon has strengthened ECE state partnerships that will impact nutrition and physical activity in ECE programs through coordinated data collection, targeted outreach for CACFP and strengthening nutrition and physical activity in ECE rules and QRIS.

Improving Breastfeeding Rates, Education, and Access to Supportive Resources

Lead: Lindsey Dermid-Gray, Nevada WIC Breastfeeding Coordinator

Background:

In 2016, Nevada WIC made great progress in breastfeeding education, promotion, and expanding resource access in 2016 through program funding and awards/grants obtained. Much of Nevada is rural and frontier communities. Many of the Nevada WIC participants in these rural/frontier areas struggle to obtain pre/postnatal care and lactation support/services.

Goals:

- Increase breastfeeding rates in Nevada
- Educate public, medical professionals, and WIC staff to help support breastfeeding initiation and maintenance.
- Increase access to lactation support, and medical consultation services in rural Nevada

Methods:

Education – Provided training to nurses in Nevada birthing centers on 5 of the 10 Baby Friendly Hospital concepts. Also, statewide Training was provided in the “Baby Behaviors” program by Jane Heinig from UCLA. Concepts include feeding/hunger/fullness cues which has shown to increase breastfeeding rates in CA WIC and other states.

Increase Access to Lactation Support – Six month pilot of “Pacify” services in 2016. Pacify provides 24/7 access to experts who can answer questions via any smart device. 1,200 Pacify memberships, funded through OT grant, gave breastfeeding WIC participants unlimited video consultations with pediatric nutritionists and lactation consultants in English and Spanish.

Increase Rates – In 2016, WIC launched a statewide breastfeeding media campaign. This campaign included radio spots, billboards, and print/online ads statewide promoting breastfeeding in public and WIC breastfeeding services.

Results:

PACIFY - 470 WIC moms enrolled and over 400 consultations have been conducted. BABY BEHAVIORS – Training was well received and has been integrated into WIC appointments. NURSE TRAINING - Successfully trained 600 nurses in the Baby Friendly Hospital concepts. BREASTFEEDING RATES – mPINC scores have increased from 71 (2013) to 75 (2015); BF rates increased 28.5% FBF to 32.1% FBF in corresponding years with continued improvements. Also shown improvements in every indicator in CDC BF report card from 2014-2016.

Wyoming WIC Breastfeeding Peer Counselor Program

Staff Involved: Janet Moran, WIC Program Manager; Connie James, Breastfeeding Peer Counselor Program Coordinator; Jodi Brooks, Breastfeeding Peer Counselor Program Assistant

Background:

The Wyoming WIC Breastfeeding Peer Counselor (BFPC) program utilizes the evidence based *Loving Support*® Model for providing peer-to-peer breastfeeding support to pregnant and breastfeeding parents.

Project Goals:

Recent program focuses include: program expansion to additional counties, helping parents set a breastfeeding goal that is discussed at subsequent appointments, and aiming for four BFPC contacts if a client enrolled in their first trimester.

Methods:

BFPCs continue to work collaboratively within the local WIC agencies. Most peer-to-peer contacts occur in the local WIC agency through in-person visits or phone calls. Additionally, the *Loving Support*® curricula is reviewed at bi-monthly conference calls with the BFPCs.

Results:

The percentage of WIC moms exclusively breastfeeding at 1 week has risen from 65% in 2015 to 67% in 2016 and fully breastfeeding rates have increased from 40% in 2015 to 42% in 2016. As a result, Wyoming WIC received a Breastfeeding Bonus Award for most improvement in breastfeeding rates. There may be other factors to consider for the rise in exclusive breastfeeding, but WIC moms frequently tell us that they like the non-judgmental support provided by BFPCs.

Summary & Discussion:

Program challenges continue to include: recruitment of qualified peer counselors, adequate funding and staff time for expansion to additional counties, and expanding communication methods to include various technologies used by the WIC population. Contacts with peer counselors are by telephone call or in-person as text messaging and social media options do not meet departmental participant privacy requirements. An additional focus area this year will be to enhance training for local agency BFPC site facilitators.

Breastfeeding Friendly Washington Program (BFWA)

People involved in project and their organizational affiliation: Washington State Department of Health Breastfeeding Workgroup, Washington State Women Infant and Children program, The Breastfeeding Coalition of Washington, The Midwives' Association of Washington State, Washington State Hospital Association, The Washington State Perinatal Advisory Board

Background/Introduction:

Improving breastfeeding practices in hospitals increases the likelihood that women will continue to breastfeed after they are discharged. Breastfeeding Friendly Washington grew out of a need to ensure that breastfeeding families get support to continue breastfeeding. This need is also reflected in the fact that BFWA is more affordable for hospitals than Baby-Friendly Initiative[®], which increases the chance that hospitals and birthing centers will have the opportunity to work toward reaching the Ten Steps to Breastfeeding Success and that increases the chance of a baby being born in a facility that has adopted this best practice.

Project Goals:

The ultimate goals of Breastfeeding Friendly Washington are to improve duration of breastfeeding among Washington's mothers and infants, and to reduce disparities in breastfeeding rates. Currently, the program is taking place in hospitals and birthing centers.

To decrease disparities among breastfeeding families and differences in participation among hospitals, BFWA attempts to even the playing field for under-resourced hospitals, so they can get the technical assistance they need to improve breastfeeding support. BFWA is based on the same guidance as the Baby-Friendly Hospital Initiative[®] (BFHI), but has no fees associated with applying. Fees associated with BFHI can create financial barriers for some hospitals and birth centers, for example, birthing centers in rural communities or hospitals with a high percentage of Medicaid patients.

Methods:

Developed the program based off state need assessment using mPINC data, collaborated with the hospital association and midwives' association to develop and disseminate the program.

Results/Summary/Discussion:

BFWA continues to reach toward its goal of improving the duration of breastfeeding and has been able to make the World Health Organization's Ten Steps more accessible to hospitals. The program has engaged hospitals that have lower self-reported MPINC scores and has been able to provide training in collaboration with WIC to hospitals that serve higher percentage of Medicaid, rural geography, and lower-income patients.

As of December, 2017: 18 hospitals and 3 birth centers have been recognized as Breastfeeding Friendly. Birth certificate data reflects 39% of all births are taking place in a Breastfeeding Friendly facility.

Autism Spectrum Disorder Knowledge and Experience Among Low-Income Parents Attending WIC

Katharine E. Zuckerman, MD MPH, Alison E. Chavez, BA, Carolina Regalado, Olivia J. Lindly, MPH, Julie A. Reeder, PhD MPH

Division of General Pediatrics, Oregon Health & Science University, Portland, OR; College of Public Health and Human Sciences, Oregon State University, Corvallis, OR; Oregon WIC Program, Oregon Health Authority, Portland, OR

Background: Children in racial/ethnic minority and low-income families are less likely to receive early diagnosis of developmental delays (DD). A lack of early diagnosis may negatively impact children's eating competence and nutrient intake.

Objectives: To assess knowledge of and familiarity with developmental delays in a sample of low-income families.

Methods: We conducted a self-administered survey with 539 parents attending their child's appointment at the Supplemental Nutrition Program for Women, Infants, and Children (WIC) in six Oregon counties. Survey items assessed knowledge of early signs of Autism Spectrum Disorder (ASD), self-reported knowledge about ASD, and having a friend or family member with ASD. Bivariable and multivariable analyses assessed differences in outcomes by racial/ethnic/language groups: non-Latino white [NLW], Latino-English proficient [EP], Latino-limited English proficient [LEP], and non-Latino other race English proficient [NL-O].

Results: Overall, WIC parents correctly identified 64.7% of early signs of DDs. Non-Latino Whites correctly identified the most signs of possible DD after adjustment for sociodemographic differences. Latino-LEP and Non-Latino-other families were more likely to have never heard of several prevalent DD conditions such as cerebral palsy and ADHDs, and were also less likely to have a friend or family member with the conditions. One-third of parents indicated they would talk with WIC staff if they had questions about a developmental concern.

Discussion: Low-income parents, particularly Latino-LEP and NL-O parents, have more limited knowledge and personal experience with DDs. Study findings suggest that interventions to reduce disparities in DD diagnosis and treatment should include increasing parent awareness in low income and ethnic minority communities. WIC may be an important source for referral to or dissemination of resources to help better inform parents about the signs of possible developmental delays. In turn, making parents more aware of signs of delay may support WIC's prevention focus.