process:. Leveraging resources that will facilitate collecting generalizable data (national metrics) while allowing sites to continue collecting nuanced data (local programs and services). Gathering input from CE teams, stakeholders, and researchers to further refine these metrics and data collection methods. Utilizing REDCap, Tableau and other resources that can facilitate data collection and analysis efforts.

3298

## Diabetes Prevalence in Rural and Urban Patients Seeking Care from the Veterans Health Administration (VHA): 2007-2012

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OBJECTIVES/SPECIFIC AIMS: To examine rural-urban disparities in prevalence of diagnosed diabetes in veterans receiving care at the VA and to determine the extent to which demographic factors and obesity levels contribute to identified disparities. METHODS/ STUDY POPULATION: A retrospective serial cross-sectional analysis was employed. A stratified weighted random sample of veterans who received care at a VA facility was selected each year for 2007 through 2012. Rural Urban Commuting Area (RUCA) codes were based on resident zip code. Diabetes was defined by two or more primary or secondary ICD-9 codes for diabetes (250.xx) within a 12 month period. Data were analyzed using complex survey-specific procedures. RESULTS/ANTICIPATED RESULTS: Diabetes prevalence 2007-2012 was lowest in urban (20.5%-21.0%), followed by highly rural (21.1%-22.1%) and rural (22.3%-23.0%) areas with the prevalence being significantly higher on the insular islands (31.0%-32.4%). In 2012, 41% of urban, 43% of rural and highly rural and 30% of insular island veterans were obese. Relative to urban areas, the odds ratio for prevalent diabetes was 1.10 (95% CI: 1.08, 1.12) for rural veterans, 1.19 (95% CI: 1.16, 1.23) for insular island veterans, and 1.00 (95% CI: 0.98, 1.02) for highly rural veterans. DISCUSSION/SIGNIFICANCE OF IMPACT: Prevalence of diagnosed diabetes is high in veterans residing in rural, highly rural and urban areas, but markedly higher on the insular islands. Understanding the burden of disease and factors driving disparities provides information required to develop targeted interventions.

3015

# Enhancing Outcomes in Childcare Settings for Young Children with Behavior Disorders: An Examination of Conscious Discipline Implementation

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OBJECTIVES/SPECIFIC AIMS: 1. Identify the extent of CD implementation for trained childcare teachers. 2. Explore teacher perspectives on the impact of CD. 3. Explore teacher perspectives on barriers and facilitators to full implementation of CD. METHODS/STUDY POPULATION: We conducted a survey with 267 childcare teachers who had been trained in CD across the state, representing early child-hood educational environments in urban and rural settings. Specific questions were asked related to level of CD implementation, perceived benefit, and facilitators/barriers to full implementation.

A random subset of the sample (8 teachers) participated in a subsequent focus group to explore survey themes in greater depth. Focus group members were asked about their rationale for attending CD training, CD implementation (including barriers/facilitators to full implementation), and perceived impact on their classrooms. The focus group was recorded and transcribed to capture questions and comments. RESULTS/ANTICIPATED RESULTS: Objective 1: 1. 30% of teachers reported full implementation of CD. 2. 50% of teachers reported partial implementation of CD. Objective 2: 1. The vast majority of teachers (95%) agreed that CD had a positive impact on their classroom, including better structure and enhanced relationships with the children. 2. The vast majority of teachers (85%) agreed that CD had a positive impact on the children in their classroom, including increases in problem-solving abilities and selfcontrol. Objective 3: 1. Most teachers (71%) reported experiencing barriers to CD implementation, with the majority of those surveyed (93%) stating that additional implementation support would be helpful. 2. The top three barriers to implementation elicited in survey and focus groups included uncertainty regarding how to begin implementing CD in the classroom, lacking materials for CD implementation, and lacking time to focus on applying knowledge from training into the classroom. 3. The top three facilitators for implementation elicited in survey and focus groups included coaching support for teachers, training agency leadership in CD, and greater perceived impact of CD. DISCUSSION/SIGNIFICANCE OF IMPACT: Childhood disruptive behaviors are among the most frequent reasons for referral to specialized services in and out of the classroom (Sukhodolsky, Smith, McCauley, Ibrahim, & Piasecka, 2016). Disruptive and aggressive behaviors are problematic, not only for victims of children who are aggressive but also for aggressive children as they age. Although effective treatments exist, the level of effective implementation of these interventions are understudied. These results demonstrate that 2/3 of teachers trained in CD are not fully implementing the model and provides concrete barriers and facilitators to current implementation. These data will provide the initial foundation for the development of a targeted implementation strategy that supports full implementation of CD within early childhood education settings.

3484

#### Examining the Use of Mobile Technology Among Low-Income African Americans and Hispanics with Hypertension

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OBJECTIVES/SPECIFIC AIMS: The primary objective of this study was to assess the interest in using mobile technology to manage hypertension and assessing medication adherence among African Americans and Hispanics living in a low-income urban community in Central PA. METHODS/STUDY POPULATION: This qualitative research study was designed using structured interviews with 30 African American participants with hypertension. The study survey consisted of 43 questions which included demographics, use of technology, technology literacy, health literacy, and medication adherence. Participants self-reported their responses about use of technology, literacy, and adherence. The data was examined using summary statistics. RESULTS/ANTICIPATED RESULTS: Out of 30 participants, 61% identified as African American and 30% identified as Hispanic. Overall, participants reported high use of

technology; with 63.3% using the internet occasionally, 73.3% having a cell phone, and 66.7% accessing the internet using a mobile handheld device. Participants expressed an interest in measuring blood pressure, accessing health information, and managing medication on their cellphone or tablet. Twenty-five percent of participants self-reported not being confident at all in managing their medication without help and remembering to take their medication as prescribed. Fewer participants (54.2%) were very confident with using technology to help manage medication and treatment. DISCUSSION/ SIGNIFICANCE OF IMPACT: This study provides important insights on the use of technology for managing hypertension in an urban low-income community. Results suggest that medication adherence, the use of technology, and the willingness to use mobile applications for hypertension management is high within this lowincome community. This study gives future researchers a framework on how to assess these specific areas in their own population.

3112

#### Factors Associated with Hesitancy of Human Papillomavirus Vaccination Among Latina Immigrant Mothers Despite Physician Recommendation

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OBJECTIVES/SPECIFIC AIMS: The purpose of this study was to examine factors associated with Latina immigrant mothers' hesitancy in having their 9-12 year old daughters vaccinated against HPV despite a physician recommendation. METHODS/STUDY POPULATION: The data analyzed for this study was from a previous effort that examined the efficacy of an intervention to promote HPV vaccination among daughters (9-12 years of age) of Latina immigrants (N=317) through a randomized trial. Baseline data among Latina immigrant mothers with unvaccinated daughters was collected prior to this intervention. Participants were surveyed on sociodemographic characteristics, knowledge and perceptions of cervical cancer and HPV, and intention to vaccinate their daughters with the HPV vaccine if recommended by the daughter's physician. RESULTS/ANTICIPATED RESULTS: Out of 317 participants, 205 reported willingness to vaccinate following a physician recommendation (64.7%) while 112 reported hesitancy (defined as an answer of "maybe") to vaccinate their daughters (35.3%). None of the participants indicated "no". No sociodemographic factors were significantly associated with vaccine hesitancy except for the daughter's health insurance status (p = 0.03). A significant difference existed in the mother's perceived risk of cervical cancer in herself based on hesitancy and willingness to vaccination (p < 0.001). Mother's awareness of HPV (p < 0.0001), knowledge of HPV (p < 0.01), her perceived risk of HPV infection in herself (p < 0.01) and in her daughter (p < 0.0001), and her worry about her daughter being infected with HPV (p = 0.02) were also significant. Finally, there were differences among mothers in confidence of being able to have their daughters complete all three doses of the vaccine (p < 0.0001), and having the time (p < 0.0001) and the money (p < 0.0001) to complete the vaccination series. Factors that were significant in the univariate analysis were then incorporated into a binary logistic multivariable regression. HPV knowledge score was excluded from this analysis due to its limited sample size (n = 169). The five variables that were strongly associated with the outcome of vaccine hesitancy included: HPV awareness, mother's perceived risk of HPV infection in their daughter, confidence in the ability to receive all

three shots in vaccine series, confidence in being able to afford the vaccine series, and daughter's health insurance. All were positively correlated with intention to vaccinate except for daughter's health insurance status. DISCUSSION/SIGNIFICANCE OF IMPACT: Despite research showing Latinos are pro-vaccination and the association between HCP provider recommendation and vaccine acceptability among parents, over 35% of Latina immigrant mothers in our study were still hesitant about having their daughters vaccinated against HPV following a physician recommendation. Factors that strongly contributed to this hesitancy included HPV awareness, mother's perceived risk of their daughter being infected with HPV, self-efficacy (ability to receive all required shots and finding time to complete the HPV vaccination series), and daughter's health insurance status. These results indicate that HCP recommendation may be not enough of a driving factor to motivate Latina immigrant mothers to vaccinate their daughters against HPV. Further research efforts should focus on heightening perceived risk of HPV infection, improving knowledge of HPV, and boosting their self-efficacy to get their children vaccinated against HPV.

3113

### Formative Evaluation of a Safety Baby Shower Intervention for Rural African American Parents and Community Advisors

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OBJECTIVES/SPECIFIC AIMS: To explore rural African American parents' and their community advisors' perspectives on the Safety Baby Shower's acceptability, feasibility, and adaptability. METHODS/ STUDY POPULATION: Collaborating with a local community organization, we explored community advisors' and expectant women's SBS experiences to understand intervention delivery and adoption in a rural underserved community (RUC). The Consolidated Framework for Implementation Research guided our data collection and analysis using focus groups and key informant interviews. We used directed content analysis to generate themes and sub codes. RESULTS/ANTICIPATED RESULTS: Five focus groups (21 participants) and one key informant interview were conducted. Identified barriers that hinder feasibility and acceptability included resources, time/ flexibility, intervention location, cultural norms and beliefs, and the lack of a birthing hospital in the county. "Baby proofing", "reinforcement products" and "teaching sleep safety on the same day as infant clinical appointment" are expectant mothers' exemplars for what comes to their minds when asked to think about safety baby showers. To improve feasibility, both community advisors and expectant mothers suggested adaptations ranging from decentralizing or rotating intervention location, using different delivery sites such as churches, scheduling intervention outside business hours, to incorporating intervention into school health fairs and barbeque events. Social media emerged as a facilitator, and integrating safe sleep education into personal baby showers emerged as an implementation strategy. DISCUSSION/SIGNIFICANCE OF IMPACT: The community advisors and expectant mothers identified a wide spectrum of potential adaptations that have potential to improve safe sleep knowledge and practices. In the next study phase, identified themes will inform intervention adaptation and suggested implementation strategies will support uptake of the adapted SBS. Identifying transformative implementation strategies and