

292

### **The role of Doulas in the health care continuum for pregnant people with substance use disorder: Perspectives of patients, Doulas, and healthcare providers**

DaShaunda<sup>1</sup>, Derek A. Chapman<sup>2</sup>, Caitlin E. Martin<sup>2</sup>, Cynthia C.F. Romero<sup>2</sup> and Gerard Moeller<sup>2</sup>

<sup>1</sup>Old Dominion University and <sup>2</sup>Virginia Commonwealth University, Eastern Virginia Medical School

**OBJECTIVES/GOALS:** The goals of this research are to 1) determine the prevalence of perinatal doula services use in Virginia, with a focus on individuals with substance use disorders (SUD), 2) evaluate awareness of doulas among pregnant and postpartum people with SUD, and 3) assess provider knowledge and interaction with doulas for the care of this population. **METHODS/STUDY POPULATION:** Both quantitative and qualitative methods will be used to evaluate patient and healthcare provider knowledge regarding doula services and the patient–doula–healthcare provider relationship. Surveys and semi-structured interviews will be administered to doulas, pregnant and postpartum women, and healthcare providers in this mixed-methods approach. Information from the Centers for Medicare and Medicaid Services National Provider Identifier (NPI) Registry, and doula training programs will be utilized to recruit doulas for participation. Paper and online recruitment materials will be posted to engage pregnant and postpartum individuals. Healthcare provider recruitment will occur via the NPI Registry along with contacting physicians' practices. SAS 9.4 and NVivo will be utilized for analysis. **RESULTS/ANTICIPATED RESULTS:** This proposed research will be an initial assessment of the current state of doula services utilization, mothers' knowledge of doulas and their purpose, and healthcare providers' awareness of and partnership with doulas to provide optimal birthing and postpartum experiences to the pregnant and parenting population with and without SUD. Results from this study will be disseminated to community doulas, pregnant people and mothers with substance use disorders, and relevant healthcare providers to decrease barriers to doula care and advocate for consistent, systematic documentation of doula services in the medical record and in public health surveillance systems. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This study will be the first study to assess doula services utilization in Virginia, with a specific focus on pregnant and postpartum women with substance use disorders. This work will support advocacy for improved data capture and utilization regarding doula services in order to reduce barriers to care and improve perinatal outcomes.

293

### **The case for investigating the palliative needs of children in foster care: A call to action**

Rebecca Singer Cohen and Rebecca Wright

Johns Hopkins School of Nursing

**OBJECTIVES/GOALS:** The purpose of this study was to document the publicly available literature, measurement tools, secondary data, and expert perspective on the intersectional care gaps and disparities of children with palliative needs in foster care. **METHODS/STUDY POPULATION:** Four data collection methods determined the frontier of available information on the palliative needs of children in

foster care. A literature review assessed the quality and content of published evidence. A catalogue of relevant measures tools and validation results determined what psychometric tools exist for the population, how well they performed in validation studies, and if any incorporated community members in their development. The National Data Archive for Child Abuse and Neglect was consulted to assess whether existing secondary data was fit for purpose. Informal interviews will be conducted with subject matter experts (pediatrics, palliative care, foster care) to determine the legitimacy and urgency of the problem. **RESULTS/ANTICIPATED RESULTS:** Health inequities among children in foster care and children with medical complexity (CMC) suggest a strong likelihood of unmet palliative care needs for CMC in foster care; however, no literature or data describe the scope and severity, and few insights support development of safe and supportive interventions to meet these needs. No national publicly available datasets include both foster-related case or placement information and diagnosis or service-specific data, including Medicaid data and the Adoption and Foster Care Analysis and Reporting System (AFCARS). No work has been published integrating foster parents or former foster youth input on palliative needs. Participatory action research methodologies with critically ill patients have led to improvements in patient experience and clinical care. **DISCUSSION/SIGNIFICANCE OF IMPACT:** The lack of data, community engagement, and validated measures to identify palliative needs of children in foster care stymie efforts to identify and correct health inequities. Participatory action research is needed to meaningfully engage foster and health care partners to determine what palliative care needs should be prioritized and measured.

295

### **Quantifying the impact of community engagement on enrollment and retention**

Christy Ledford<sup>1</sup>, Claire S. Spears<sup>2</sup>, Leslie E. Wolf<sup>2</sup>, J.

Aaron Johnson<sup>1</sup>, Kathleen McIntyre<sup>1</sup>, Nicholas Arrowood<sup>1</sup>,

Ashley Allen<sup>2</sup> and Salma Abdirahim<sup>2</sup>

<sup>1</sup>Augusta University and <sup>2</sup>Georgia State University

**OBJECTIVES/GOALS:** Substantial evidence supports the use of community engagement in CTS. Yet, there is a lack of empirical basis for recommending a particular level of community engagement over others. We aimed to identify associations between level of community involvement and study process outcomes, focusing on procedures to promote enrollment and inclusion. **METHODS/STUDY POPULATION:** Using manifest content analysis, we analyzed community engagement (CEn) strategies of studies indexed in ClinicalTrials.gov, focusing on studies 1) associated with 20 medical schools located in 8 southern states in the Black Belt, 2) conducted in 2015–2019, and 3) on 7 topics: cancer, depression, anxiety, hypertension, substance use disorder, cardiovascular disease, and HIV/AIDS. Data source was the ClinicalTrials.gov entry and publication for each study. We categorized each study on level of community involvement as described by the study protocol CTS Consortium Community Engagement Key Function Committee Task Force on the Principles of Community Engagement continuum. Outcomes included recruitment and representativeness. Other codes included funder type, study phase, study status, and time to enrollment. **RESULTS/ANTICIPATED RESULTS:** Of 890 studies that met

inclusion criteria, only 493 had published findings. 286 studies (58%) met enrollment targets. Only 9 studies described any level of CEn (1 outreach, 3 consult, 1 involvement, 3 collaboration, and 1 shared leadership). Time to enrollment for these 9 studies (mean 28.78 mos.) was shorter than for studies without CEn (mean 37.43 months) (n.s.). CEn studies reached significantly higher enrollment (CEn mean = 2395.11, non-CEn mean = 463.93), *p* DISCUSSION/SIGNIFICANCE OF IMPACT: Results demonstrate the substantial effect of CEn on enrollment and inclusion in clinical studies. However, the infinitesimal number of studies that reported CEn did not allow comparisons of level of engagement on the outcomes. Findings highlight ethical questions surrounding the lack of publishing incomplete studies.

296

### **Demonstrating trustworthiness within the community through a human-centered design research approach**

Bridget Hawryluk, Dustin Lynch and Sarah Wiehe  
Indiana CTSI

OBJECTIVES/GOALS: As translational researchers, we seek to offer more treatments to more people, more quickly. Essential to this mission, we must demonstrate trustworthiness to establish trusted with those we seek to benefit. Research Jam uses a human-centered design (HCD) research approach to achieve this. METHODS/STUDY POPULATION: HCD is an iterative process that focuses on understanding people's contexts while designing products and services collaboratively with the people who will interact with and be affected by the research. This generative approach helps participants express tacit and latent knowledge – emotions, needs, and desires that are often challenging to communicate verbally. We work with individuals who have lived experience relevant to the research being conducted and use HCD activities to help people share their thoughts, concerns, and ideas. These activities are highly interactive, promote collaboration, and explore topics with respect and sensitivity. RESULTS/ANTICIPATED RESULTS: At Indiana Clinical and Translational Sciences Institute, we use the AAMC's principles of trustworthiness. These principles parallel the tenets of HCD research; thus, taking an HCD research approach naturally builds trust between the researcher and participants and offers tangible benefit to the research, the researcher, and those with lived experience who participate. We have ten years of work collaborating with 40 PIs and over 600 participants. Our experiences demonstrate that this approach can create an environment where participants feel comfortable as they share their thoughts, concerns, and ideas which influences the research that could affect their lives. DISCUSSION/SIGNIFICANCE OF IMPACT: An HCD approach helps demonstrate a researcher's trustworthiness with the population being served. This is essential to achieve a lasting impact by discovering the best solutions from the community's perspective and identifying partners to help implement solutions.

297

### **Food is medicine: assessing medically tailored meals through a health equity lens for Hispanic/Latinx and monolingual Spanish-speaking populations**

Valerie Kahkejian and Kartika Palar  
UCSF

OBJECTIVES/GOALS: To evaluate disparities in diabetes outcomes between Hispanic/Latinx and non-Hispanic participants in a

medically tailored meal intervention, assess effect modification by ethnicity/language, and explore cultural factors influencing intervention effectiveness for diverse T2DM populations. METHODS/STUDY POPULATION: This mixed-methods study, part of the Changing Health through Food Support for Diabetes RCT (*n* = 246), compares standard diabetes care to a 6-month medically tailored meal intervention for T2DM patients with food insecurity. It examines differences in intervention effectiveness among Latinx, Spanish-speaking participants and non-Latinx, English-speaking participants from San Francisco and Alameda counties. Quantitative measures include HbA1c, food security scores, and hospitalization rates. Qualitative interviews explore diabetes management, food access, and cultural factors. Baseline disparities are assessed using *t*-tests and chi-square analyses, while longitudinal changes are evaluated with mixed-effects models. Thematic analysis of qualitative data identifies emerging patterns. RESULTS/ANTICIPATED RESULTS: We expect to find significant baseline disparities in glycemic control and food security between Latinx- and Spanish-speaking participants compared to their counterparts. The medically tailored meal intervention is anticipated to show differential effectiveness, with potentially smaller improvements among Latinx and Spanish-speaking groups. While we hypothesize that medically tailored meals will lead to improved glycemic control and reduced food insecurity across all groups, the magnitude of improvement may vary. Qualitative data are expected to reveal unique cultural and linguistic barriers contributing to these disparities, as well as insights into the acceptability and cultural appropriateness of the intervention. DISCUSSION/SIGNIFICANCE OF IMPACT: This study will inform culturally tailored medically tailored meal interventions for Hispanic/Latinx- and Spanish-speaking populations, addressing disparities in diabetes outcomes and food security. Findings will shape “food is medicine” initiatives and policies to reduce chronic disease burden and health inequities in diverse communities.

298

### **Leveraging community engagement studios (CE Studios) to develop an interview guide addressing the sexual health needs of justice-involved youth**

Chioma Kas-Osoka<sup>1</sup>, Mariah Chambers<sup>1</sup>, Stephanie T. Miller<sup>1</sup>,  
Velma Murry<sup>2</sup> and Jennifer Erves<sup>3</sup>

<sup>1</sup>Meharry Medical College; <sup>2</sup>Vanderbilt University and <sup>3</sup>Vanderbilt University Medical Center

OBJECTIVES/GOALS: 1. Demonstrate the need to apply principles of community-engaged research to various stages of the research process. 2. Outline the process of using CE Studio(s) to redesign an interview guide for service providers of youth involved in the justice system. METHODS/STUDY POPULATION: Service-providers provide a critical lens with which to view the sexual health needs of justice-involved youth. Minimal research describes the unique perspectives of those who work directly with this vulnerable population to address their sexual health needs. The goal of this project is to outline the process of using CE Studio(s) to redesign an interview guide for service providers. The guide is aimed at gathering insight into the knowledge, access, and use of sexual health services for justice-involved youth. Preparation involves the preplanning phase, including the drafting of the interview guide; engagement consists of recruitment and implementation of the CE Studio; and restructuring will outline the application of feedback and finalization of the interview guide. RESULTS/ANTICIPATED