

By working with her mentor, our first fellow's research has expanded from basic discovery science in a university hospital to development of a neonatal intensive care unit intervention to be employed with parents in the community. The 2018-2019 scholar, who utilized the community engagement research core (CERC) of the PSU CTSI in preparation of a PCORI grant, has since received the PCORI award and is working with her mentor to bring her innovative mental health screenings to the public schools. We are currently evaluating applications for the third year of the program, and please to have engaged applicants from across several Penn State campuses and disciplines. **DISCUSSION/SIGNIFICANCE OF IMPACT:** The fellowship is enjoying early success in terms of fellow productivity, expanding translational research expertise, and fueling interest across the Penn State campuses in community engagement research. Future work will focus on sustainability planning for this type of program, metrics for tracking success, and plans for integrating fellows into a growing community of engaged scholars at the university.

3082

Cardiovascular Health Promotion Among African-Americans: Community Participatory Approach to Design an Innovative Mobile-Health Intervention

LaPrincess Brewer¹, Sharonne Hayes, Amber Caron, Christina Smith, Karen Schaepe, Sarah Jenkins, Jacqueline Johnson, Clarence Jones, Carmen Radecki Breitkopf, Lisa Cooper and Christi Patten

¹Mayo Clinic

OBJECTIVES/SPECIFIC AIMS: To translate a behavioral theory-informed, evidence-based, face-to-face health education program into an mHealth lifestyle intervention for African-Americans (AAs). **METHODS/STUDY POPULATION:** This mixed methods study consisted of 4 phases, using an iterative development process to intervention design with the AA community. In Phase 1, we held focus groups with AA community members and church partners (n=23) to gain insight regarding the needs and preferences of potential app end users. In Phase 2, the interdisciplinary research team synthesized input from Phase 1 for preliminary app design and content development. Phase 3 consisted of a sequential 3-meeting series with the church partners (n=13) for iterative app prototyping (assessment, cultural tailoring, final review). Phase 4 was a single group pilot study among AA church congregants (n=50) to assess app acceptability, usability, and satisfaction. **RESULTS/ANTICIPATED RESULTS:** Phase 1 focus groups indicated preferences for general and health related apps: multifunctional; high-quality graphics/visuals; evidence-based, yet simple health information; and social networking capability. Phase 2 integrated these preferences into the preliminary app prototype. Feedback from Phase 3 was used to refine the FAITH! App prototype for pilot testing. Phase 4 pilot testing indicated high acceptability, usability, and satisfaction of the FAITH! App. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This study illustrates the process of using formative and CBPR approaches to design a culturally relevant, mHealth lifestyle intervention to address CV health disparities within the AA community. Given the positive perceptions of the app, our study supports the use of an iterative development process by others interested in implementing an mHealth lifestyle intervention for racial/ethnic minority communities.

3309

Clinic-Level Factors and Retention in Care among People Living with HIV (PLWH) in a United States (US) Multi-Site Cohort, 2010-2016

Cassandra Oliver¹, Peter Rebeiro, Bryan Shepherd, Jeanne Keruly, Kenneth Mayer, Christopher Matthews, Bulant Turan, Richard Moore, Heidi Crane, Elvin Geng and April Pettit¹

¹Vanderbilt University Medical Center

OBJECTIVES/SPECIFIC AIMS: The National HIV/AIDS strategy aims to increase retention in care (RIC) to reduce HIV transmission and mortality. Previous studies have evaluated clinic-level interventions such as appointment reminders and peer navigation. However, few studies have investigated the association between multiple clinic-level factors and RIC among PLWH across the United States. We conducted a multi-site cohort study to identify clinic-level factors associated with RIC in the United States from 2010-2016. **METHODS/STUDY POPULATION:** We included PLWH with at least one HIV primary care visit from 2010-2016 at seven sites of the Center for AIDS Research (CFAR) Network of Integrated Clinical Systems (CNICS). Individual-level data collected as part of routine clinical care were abstracted from the electronic health record. Clinic-level data were gathered through a survey and included questions on site characteristics (i.e. clinic volume) as well as services available at the site during each year of the study: peer navigation, RIC posters/brochures, laboratory test timing, flexible scheduling, appointment reminder types, and stigma support services defined as intensive HIV education and advocacy regarding support to address stigma at outreach visits. RIC was defined as ≥ 2 encounters per year, ≥ 90 days apart, observed until death, administrative censoring (December 31, 2016), or loss to follow-up (no visit for >12 months with no future visits). Poisson panel regression with robust error variance, clustering by site and adjusting for calendar year, age (modeled with a cubic spline), sex, race/ethnicity, and HIV transmission risk factor, was used to estimate incident rate ratios (IRR) with 95% confidence intervals (CI) for RIC. Clustering by site has been shown to absorb for clustering that could occur at the individual level as well. **RESULTS/ANTICIPATED RESULTS:** Among 21,046 patients contributing 103,348 person-years, 67% of person-years were RIC. Text appointment reminders (IRR = 1.13; 95% CI: 1.03-1.24) and stigma support services (IRR=1.11; 95% CI: 1.04-1.19) were significantly associated with RIC. RIC disparities in individual-level patient characteristics were observed even after accounting for clinic-level characteristics. Older patients were more likely to be RIC demonstrated through year comparisons due to the use of a spline; for age 50 years (IRR = 1.07, 95% CI: 1.06-1.08) and 60 years (IRR = 1.15, 95% CI: 1.13-1.17) compared to 45 years. Female PLWH were more likely to be RIC compared to males (IRR = 1.03, 95% CI: 1.02-1.05) and Hispanic PLWH were more likely to be RIC compared to white, non-Hispanic PLWH (IRR = 1.09, 95% CI: 1.05-1.13). Although commonly found to be associated with worse RIC, Black race and injection drug use were not associated with RIC in this population. **DISCUSSION/SIGNIFICANCE OF IMPACT:** In this multi-site US cohort study from 2010-2016, availability of text appointment reminders and stigma support services at a clinic were associated with approximately 10% higher probability of RIC than at clinics without those services. RIC disparities persisted with respect to individual-level characteristics of age, sex, and race/ethnicity even after accounting for these clinic-level factors. Prospective studies

examining the impact of these clinic-level factors and individual-level uptake of these services on RIC are needed.

3462

Community-Engaged Research in Emergency Dispatch: Getting a 360 View

Alissa L Wheeler¹, Heather Darata and Jenny Hurst

¹International Academies of Emergency Dispatch

OBJECTIVES/SPECIFIC AIMS: Community-engaged research can provide important input to researchers to understand the impact of health services on diverse communities. In emergency (911) dispatch research, most studies have focused on specific health conditions, especially on identifying and managing those conditions remotely and identifying the most appropriate resources to send. Community-engaged research can add a needed component to these studies, identifying not only what happens when someone calls 911, but who calls and who doesn't, what barriers community members encounter when they call, and what they expect from their 911 service. **METHODS/STUDY POPULATION:** A recent study published in the *Journal of Clinical and Translational Science* outlined a method for identifying and evaluating the needed competencies and readiness of individual researchers to do effective community-engaged research. The investigators involved in an ongoing study on community attitudes toward 911 propose to use the methods outlined in that study to receive feedback from their Community Advisory Board on their own competencies and readiness. **RESULTS/ANTICIPATED RESULTS:** It is anticipated that 13 people will be involved in providing feedback to the investigators, including all official member of the Community Advisory Boards and all supportive academic staff and faculty. The feedback will be gathered using a survey instrument developed from the recently-published study and will include questions about the purpose of the research, openness to feedback, communication, cultural sensitivity, community presence, power sharing, recognizing partner contributions, and developing community capacity. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Identifying the most appropriate resources to send to any given emergency is the primary role of the emergency dispatcher. However, they are also public servants, providing care and comfort in a time of stress to members of many diverse communities. As such, it is critical that they understand the needs and expectations of those communities, as well as the barriers they face in calling 911. The proposed study adds value to an ongoing community-engaged research project by providing feedback about readiness and competency to the investigators.

3573

Critical Barriers to Effective Community-Academic Research Partnerships and Potential Solutions

Susan J Woolford, Ayse G. Buyuktur, Patricia Piechowski, Aalap Doshi and Erica E. Marsh

University of Michigan School of Medicine

OBJECTIVES/SPECIFIC AIMS: Background: The importance of engaging community in research and fostering community-academic research partnerships is increasingly acknowledged by Clinical and Translational Science Award (CTSA) institutes. However, forming and maintaining such collaborations is often hampered by numerous challenges. It is critical to investigate the barriers to effective community-academic partnerships and to develop novel approaches to

overcome these barriers. **Objective:** To explore community and academic perspectives of the challenges faced by community-academic research partnerships and potential solutions to these identified challenges. **METHODS/STUDY POPULATION:** **Methods:** In an effort to explore creative approaches to address these issues, the Community Engagement Program at the Michigan Institute for Clinical & Health Research (MICHR), the CTSA site that serves Michigan, hosted a retreat to elicit the input of community members and academics from across the state. There was a mix of participants ranging from those with established community-academic partnerships to others who were new to community-engaged research and in early stages of forming partnerships. At the retreat, attendees were randomly divided into groups and asked to answer the specific question, "What are your barriers to partnering in research?" After each group identified a set of barriers and reported their findings to the entire room, attendees were asked to work again in their small groups to discuss potential solutions to these barriers. Ideas for solutions were also shared with the entire room. As part of the process of brainstorming about these questions, attendees were asked to document their ideas — for both barriers and solutions — on post-it notes which were then grouped by category. Artifacts from the retreat were saved digitally and transcripts made from these records. The findings were then analyzed to identify common themes. **RESULTS/ANTICIPATED RESULTS:** Results: Eighty-six participants attended the retreat from across the state of Michigan. Forty-three represented community organizations that focus on addressing a wide array of social determinants of health issues. The remaining forty-three participants represented various academic institutions. The most frequently mentioned challenges to community-academic partnerships were related to communication and relationship building. To overcome barriers in these areas, participants noted that it is critical to collaboratively and explicitly identify shared goals, values and norms in the early stages of partnership development. This was closely linked to the need for additional funding to help foster and strengthen relationships by allowing partners to spend time together to both work and socialize informally, preferably in face-to-face settings. These were deemed crucial for building trust and common ground. In addition, more equitable funding and role distribution — including shared leadership and governance of research projects between community and academia— that recognizes and supports the true costs of involvement in research for community members was viewed as important. Other frequently noted issues on the part of community members were the need for greater respect for community partners and for more training opportunities to build capacity within communities to participate in research. Participants from academic institutions emphasized that the current requirements and timeline for promotion in academia make it harder for them to participate in community-engaged research, especially as early career researchers. They maintained that wider recognition of the value of community-engaged research is necessary and that this requires the support of home departments. Finally, participants underscored the importance of building infrastructure to better connect potential partners from the community and academia by making it easier to identify common interests and reciprocal strengths. **DISCUSSION/SIGNIFICANCE OF IMPACT:** **Conclusion:** The problems faced by community-academic partnerships may be alleviated by working with community and academic members to identify potential solutions. Further work is needed to systematically examine barriers and the efficacy of solutions to enhance community-academic partnerships. **Acknowledgements:** We thank all attendees of the MICHR Community Engagement retreat for their participation in this activity that explored barriers to effective community-academic