

Research (MICHR) at the University of Michigan (UM) is working to develop community networks that drive clinical and translational research on community-identified health priorities. **METHODS/STUDY POPULATION:** These CBRNs will be modeled from successful work that has been accomplished in Jackson, MI where stakeholders from the local healthcare community, County Health Department, Health Improvement Organization, and grassroots community members created a Community of Solution to address the unmet behavioral health and social needs of community members. The CBRN's will focus on identifying community health priorities by receiving input from community members in underserved communities using deliberative software called Choosing All Together (CHAT). **RESULTS/ANTICIPATED RESULTS:** In the fall of 2017, 3 focus groups were held in Northern Michigan to identify community health priorities. The top 5 community health priorities include; (1) mental wellness, (2) long-term illness, (3) alcohol and drugs, (4) air, water, and land, and (5) affording care. Additional focus groups are scheduled for the winter in 2 additional geographic areas. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Future work for the creation of CBRNs includes building leadership groups comprised of clinicians, community leaders, public health leaders, health system leaders and researchers to inform the leadership groups of community-identified health priorities. In addition, the team is working to identify a platform to connect academic investigators across UM and community partners on shared research priorities in real time. In order to measure and map relationships within the networks, we are planning to utilize Social Network Analysis as an evaluation tool.

2308

### Community health workers as research advocates

Amparo Castillo, Emily Anderson, Alicia Matthews, Raymond A. Ruiz, Wendy Choure, Kevin Rak and Marilyn Willis

Chicago Center for Clinical and Translational Science, University of Illinois

**OBJECTIVES/SPECIFIC AIMS:** Background: Failure to involve hard-to-reach populations in clinical research denies the potential benefits of research to the excluded groups, perpetuating health disparities. Employing community health workers (CHWs) may be an effective strategy to increase outreach and engagement of marginalized groups. CHWs are members of the target communities with a personal commitment to help their neighbors, and who serve as informants and communicators among their peers. CHWs may be particularly effective in addressing individual and cultural barriers to research participation. Because of their unique background and community-based roles, tailored training programs for CHWs are needed. The Recruitment, Retention, and Community Engagement Program at the UIC Center for Clinical and Translational Sciences seeks to train CHWs to be involved in the recruitment and enrollment of participants in clinical trials. We developed an 8-hour training that covers basic research methods (e.g., randomized clinical trials, longitudinal studies); research activities (e.g., surveys, interviews); and research ethics. The training focuses on the development of communication skills necessary for ethical recruitment and informed consent, providing strategies for addressing mistrust, fear and misunderstanding around the research process. **Aim 1:** To evaluate the feasibility of the CHW training by assessing. **Aim 1.1:** Recruitment of participants; **Aim 1.2:** Completion of training session (8 hr). **Aim 2:** To evaluate acceptability of training by assessing. **Aim 2.1:** Satisfaction with training; **Aim 2.2:** Cultural competence of training content; **Aim 2.3:** Participant self-efficacy in reproducing information. **Aim 3:** To collect performance measures by assessing. **Aim 3.1:** Knowledge gain and retention; **Aim 3.2:** Self-efficacy in identifying and addressing negative beliefs about research; **Aim 3.3:** Participants' readiness to refer and/or recommend participation in clinical trials. **METHODS/STUDY POPULATION:** **Methods:** This is a pilot study with a single-group repeated-measures design with assessments at baseline, 1 week post-test, and 3- and 6-month follow-ups. We aim to recruit 25 CHWs working with organizations serving the needs of ethnic minorities in Chicago. We will evaluate feasibility (recruitment, completion of training and assessments) and acceptability of the training (satisfaction with training, cultural appropriateness of content and delivery, participant self-efficacy in reproducing information). Performance measures assessed through self-administered surveys at baseline, 1 week post-training, 3 months, and 6 months will include knowledge, attitudes toward research, and self-efficacy in identifying and addressing barriers to participation. Readiness to recruit and obtain informed consent will be assessed during an observed simulation activity with a standardized participant. **Data analysis:** Demographic data will be collected, and descriptive and inferential analyses will be conducted. Pretest and post-test questionnaire data will be compared using *t*-tests. In the informed consent simulation, individuals will be scored on whether they adequately addressed required elements of the informed consent process. Data gathered from the informed consent simulation will also be used for program evaluation and formative purposes;

feedback on strengths and areas for improvement will be provided to participants. **RESULTS/ANTICIPATED RESULTS:** **Expected results:** It will be feasible to implement the training of CHWs, reaching the expected goal of 25 participants, with at least 70% of them completing the 8-hour training. We expect to collect data demonstrating acceptability of the training with a score of "good" or "excellent" by 70% of participants. At least 70% will rate the training as "culturally acceptable" or better, and will show improved self-efficacy in the delivery of information from pretest to post-test by at least 30%. Performance measures will demonstrate improvements in research knowledge by 30% from pretest to post-test; increased self-efficacy in identifying and addressing negative beliefs about research process, by at least 30%. A minimum of 70% of participants will demonstrate readiness to refer and/or recommend participation in clinical trials by scoring at or above 70% in evaluation of performance with standardized participants. Evaluation of knowledge retention at 3 and 6 months post-training will not take place before the Translational Science Conference in March 2018. **DISCUSSION/SIGNIFICANCE OF IMPACT:** **Discussion/Impact.** The outcomes of this evaluation may advance our knowledge of community obstacles to participation in research, and shed light on successful strategies to address them. Information obtained will be used to address limitations of the training. Even though the sample is small we expect to identify trends in quantitative measures that will support an application for funding for a larger randomized study. Once we have developed an effective training model, we expect to disseminate it to other CTSA's for broad implementation.

2447

### Community voices first: A multi-method approach to shaping institutional response to Flint's water crisis

Karen D. Calhoun<sup>1</sup>, Kent Key<sup>1</sup>, E. Yvonne Lewis<sup>1</sup>, Jennifer Carerra<sup>1</sup>, Joseph Hamm<sup>1</sup>, Susan Woolford<sup>1</sup>, E. Hill De Loney<sup>1</sup>, Ella Greene-Moten<sup>1</sup>, Arlene Sparks<sup>2</sup>, Don Vereen<sup>3</sup>, Patricia Piechowski-Whitney<sup>4</sup>, Kaneesha Wallace<sup>5</sup>, Ismael Byers<sup>6</sup>, Athena McKay<sup>5</sup>, DeWaan Robinson<sup>7</sup>, Jess Holzer<sup>8</sup>, Vanessa De Danzine<sup>9</sup>, Adam Paberz<sup>4</sup>, Meghan Spiroff<sup>4</sup> and Erica Marsh<sup>10</sup>

<sup>1</sup> University of Michigan School of Medicine, Ann Arbor, MI, USA;

<sup>2</sup> Dare2Dream, Flint, MI, USA; <sup>3</sup> University of Michigan School of Public Health, Ann Arbor, MI, USA; <sup>4</sup> Institute for Clinical and Health Research, University of Michigan, Ann Arbor, MI, USA; <sup>5</sup> Healthy Flint Research Coordinating Center, Flint, MI, USA; <sup>6</sup> Hope College, Holland, MI, USA; <sup>7</sup> Artistic Vision Enterprise, Flint, MI, USA;

<sup>8</sup> Hofstra University, Long Island, NY, USA; <sup>9</sup> New York City Police Department, New York City, NY, USA; <sup>10</sup> University of Michigan Health System and Hospitals, Ann Arbor, MI, USA

<sup>10</sup> University of Michigan Health System and Hospitals, Ann Arbor, MI, USA

**OBJECTIVES/SPECIFIC AIMS:** Explore perceptions of Flint stakeholders on the water crisis regarding trust and the capacity of faith and community-based organizations providing public health services to address community needs. **Analyze the community's voice shared at (1) 17 key community communications (community/congressional meetings and events), and (2) during 9 focus group sessions, in which residents, faith-based leadership and other stakeholders discuss issues and concerns on the Flint Water Crisis, and recommend ways to address them. Develop a framework that defines core theories, concepts and strategies recommended by the community to help rebuild trust and the quality of life in Flint, Michigan, and support other communities experiencing environmental stress. METHODS/STUDY POPULATION:** Study population: faith-based leaders, seniors, youth, Hispanic/Latino and African American stakeholders, and others experiencing inequities in the city of Flint. Convene 9 focus group sessions (recorded and transcribed) to learn community perceptions on trust and ways to address it. Validate accuracy of the transcriptions with community consultants to reconcile any inaccurate information. Through a community engaged research (CEnR) process, review and analyze qualitative data from the 9 focus group sessions, and quantitative data from 2 surveys documenting (1) demographic backgrounds of focus group participants, and (2) their perceptions on trust and mistrust. Prepare a codebook to qualitatively analyze the focus group data summarizing community input on trust, mistrust, changes in service delivery among community and faith-based organizations, and ways to re-build trust in the city of Flint. Transcribe the community's voice shared during 17 key events, identified by a team of community-academic stakeholders (i.e., UM Flint water course, congressional and community events, etc.), in which residents and other stakeholders discuss issues and concerns on the Flint Water Crisis, and recommend ways to address it. Qualitatively analyze the transcriptions, using a CEnR process to prepare a codebook on key themes from the community's voice shared at these events, and recommendations on ways to address it. Compare and contrast findings between

the two codebooks developed from (1) the focus group data and (2) qualitative analysis of community voice during public meetings and events. Synthesize this information into a framework of core theories, concepts and rebuilding strategies for Flint, Michigan. RESULTS/ANTICIPATED RESULTS: It is important to note many undocumented immigrant populations in Flint fear deportation and other consequences, hampering their ability to obtain service and provide community voice. Through our purposive sampling approach, we will hear from community voices not often included in narratives (i.e., seniors, youth, Hispanic/Latino residents). The presentation will present findings documenting levels of trust and mistrust in the city of Flint; and a framework of recommendations, core theories and concepts on ways to reduce, rebuild and eliminate stress that will be helpful to other communities experiencing distress. DISCUSSION/SIGNIFICANCE OF IMPACT: To our knowledge, levels of trust and mistrust in Flint have not been documented thus far. We will compare and contrast common themes presented by the community at public meetings and events with themes presented in our focus group effort on trust. Faith and community-based providers were among the first responders to the Flint Water Crisis. The effort will also share perceptions on changes in public health service delivery, and observations on preparedness for these roles that occurred among community and faith-based providers. Finally, the effort will (1) support the design of a research agenda, (2) define a framework of core theories, concepts and recommendations developed by the community to help rebuild trust in Flint, Michigan; and (3) support other communities addressing environmental distress.

233 I

### Community-informed adaptation of Group Well Child visits for limited English proficiency Latino families

Rheanna Platt and Sarah Polk

Johns Hopkins University School of Medicine

OBJECTIVES/SPECIFIC AIMS: We propose to adapt a curriculum for group well-child care in order to (1) improve the experience of care for Latino immigrant families, (2) better address maternal psychosocial concerns impacting parenting and (3) teach parenting practices that promote healthy behaviors, and (4) improve LEP parent health literacy, engagement, and self-management in care. METHODS/STUDY POPULATION: This study is composed of a series of focus groups with 4 target populations: (1) The Johns Hopkins Bayview Children's Medical Practice Latino Family Advisory Board (LFAB) (multiple meetings). The LFAB has been in existence since 2011, and has experience in iteratively adapting educational materials, both written and video, and in providing input on social work services and healthcare utilization. We will meet with the LFAB over the course of up to 8 meetings. During these meetings, the following themes will be discussed: (A) The concept of Group Well Child Care will be discussed and LFAB members will be asked about potential benefits and drawbacks of this format. (B) LFAB members will also be asked about group discussion topics that should be prioritized. Study staff will both bring up a list of topics (feeding, sleep, development, behavior, parent stress) and ask for input on additional items that should be discussed. (C) Core components of the mothers and babies course, a group perinatal depression intervention originally developed with Latina mothers, will be presented and discussed with board members, who will be asked to prioritize the components for salience and perceived helpfulness as well as inclusion in the Group Visit Curriculum. Potential benefits and drawbacks of including components of this program will also be asked of LFAB members. Members will not be asked about their depressive symptoms. (2) Pediatric providers (including social workers, MDs, NPs, and RNs) (1 focus group) who agree to participate will also be asked about perceived benefits and drawbacks of the group well-child care model, topics that should be prioritized in the educational components, and the benefits and drawbacks of including components of a perinatal depression prevention program in the group well child visit curriculum. (3) Obstetric group visit providers—Obstetric providers of group prenatal care to LEP Latinas at JHBMC will be asked about the benefits and drawbacks of group prenatal care with their patient population, as well as topics perceived to be of relevance to the patient population based on their experience with group prenatal care and discussions that emerged during the course of the facilitated groups. (4) Obstetric group visit patients (3 focus groups) LEP Latina patients who have participated in at least 3 group prenatal visits will be invited to participate in focus groups exploring the aforementioned topics. The experience of discussing psychosocial issues, including maternal depressive symptoms, in the group visit format will be emphasized. RESULTS/ANTICIPATED RESULTS: One focus group with obstetric providers and has thus far been conducted. Obstetric providers reported that patients were very open in discussing prior experiences with postpartum depression, and discussed feelings of loneliness with their peers in this setting. Anxiety was also frequently discussed. History of domestic violence was discussed more frequently than current domestic violence. DISCUSSION/SIGNIFICANCE OF IMPACT: Group visits may represent an opportunity to more effectively address psychosocial concerns in Latinas. Work needs to be done to understand which topics are most effectively and appropriately addressed in the group Versus individual format.

### 2056 Culture meets person-centered care: An empirical study of mental health and care planning among Latinx and Asian communities

Miraj U. Desai<sup>1</sup>, Nadika Paranamana<sup>2</sup>, Maria Restrepo-Toro<sup>1</sup>, Luz Ocasio<sup>1</sup>, Yolanda Herring<sup>1</sup>, Merarilisse Crespo<sup>1</sup> and Larry Davidson<sup>1</sup>  
<sup>1</sup> Yale School of Medicine; <sup>2</sup> University of Hartford

OBJECTIVES/SPECIFIC AIMS: This poster will present preliminary results from a study examining whether person-centered care planning—a new innovation in community mental health care—responds to the culture of, and helps reduce health disparities among, Latinx and Asian populations. METHODS/STUDY POPULATION: The study was funded by an NIMH/NIH Administrative Supplement for Minority Health and Mental Health Disparities Research and approved by the Institutional Review Board of the authors' university. Participants included 26 mental health clients and 12 mental health providers of diverse backgrounds. The study employed empirical qualitative methods to explore client understandings of mental health, client experiences of culture and discrimination, and the process of care engagement and care planning from both client and provider perspectives. The analysis team itself included people of Latinx and Asian background, as well as a person with lived experience of mental health recovery. RESULTS/ANTICIPATED RESULTS: We anticipate that the results will show ways in which person-centered care successfully incorporates clients' goals, but that there will also be evidence of ways in which the clinical encounter struggles to incorporate more social, collective, and cultural values and approaches. DISCUSSION/SIGNIFICANCE OF IMPACT: The poster will present up-to-date findings on this project, which speaks to pressing issues of health equity and community engagement for 2 of the fastest growing populations in the country.

2558

### Current efforts to increase adolescent human papillomavirus vaccination rates using school-based setting in Starr County, Texas

Ana Marina Rodriguez<sup>1</sup>, Kathleen Schmelzer<sup>2</sup>, Sapna Kaul<sup>3</sup> and Yong-Fang Kuo<sup>3</sup><sup>1</sup> University of Texas Medical Branch; <sup>2</sup> Anderson Cancer Center; <sup>3</sup> University of Texas Medical Branch at Galveston

OBJECTIVES/SPECIFIC AIMS: Improving human papillomavirus (HPV) vaccination rates ultimately decreases the morbidity and mortality of HPV-associated diseases. A school-based program was piloted in the Rio Grande City Consolidated Independent School District (RGCCISD) to increase HPV vaccination. METHODS/STUDY POPULATION: We assessed baseline HPV vaccination; surveyed 622 parents of eligible children aged  $\geq 9$  years; and piloted and developed a school-based HPV education and vaccination program in 1 middle school in 2017 and 4 additional middle schools in 2018. The parent survey included (1) demographic information, (2) an assessment of parental knowledge about the HPV vaccine, and (3) information about their children and HPV vaccine experience. Results of the parent survey and pilot program are in progress. RESULTS/ANTICIPATED RESULTS: As of 9/1/2016, 20.4% of the 7527 RGCCISD eligible students ( $\geq 9$  years) had completed the HPV vaccine. Baseline completion rates were higher for RGCCISD students aged 12–14 years compared with students aged 9–11 and  $\geq 15$  years (28.4% vs. 16.5%). Baseline completion rates for RGCCISD adolescents were substantially lower than those reported in NIS-Teen and for Texas (42% females and 28% males for NIS-Teen vs. 41% and 24% for the state of Texas). DISCUSSION/SIGNIFICANCE OF IMPACT: Initial results show that engagement with key stakeholders is important and schools are a great venue for delivering and increasing HPV vaccination.

2458

### Determining the prevalence and associated multilevel characteristics of undiagnosed diabetic retinopathy

Kristen Nwanyanwu, Marcella Nunez-Smith, Mayur Desai and Thomas Gardner

Yale School of Medicine

OBJECTIVES/SPECIFIC AIMS: Diabetic retinopathy is the leading cause of blindness in adults aged 25–64 years. The prevalence of diabetic retinopathy is projected to increase 4-fold by 2050. Racial and ethnic minorities have a higher prevalence and greater severity of diabetic retinopathy. Over 50% of racial and