

approximately 3 quarters of a million people in the county remain uninsured. Regardless of insurance status, nearly a quarter of LA County residents reported having difficulty obtaining needed medical care, and among those making less than the poverty level, 43% had difficulties. There is still much to understand about barriers to obtaining insurance and accessing healthcare in Los Angeles in the post-ACA era. Our primary objective was to understand how safety net patients are obtaining, maintaining and using their insurance after the ACA. Specifically we hope to understand the barriers and drivers of these three processes. **RESULTS/ANTICIPATED RESULTS:** We conducted a qualitative study of 34 safety net patients with 3 different insurance types in LA County. We conducted in-person interviews with adult patients (ages 18–64 years), who had either MediCal, MyHealthLA, or were uninsured. Our interview guide was based on existing literature, a previous qualitative study conducted in Massachusetts and input from experts in the field. We pilot tested our interviews in English and Spanish and then recruited our participants from 3 sites: LAC + USC (a publicly funded county hospital), The Wellness Center (a resource center for safety net patients), and White Memorial Medical Center (a private safety net hospital). We approached patients in the ED and urgent care waiting rooms and obtained informed consent for this IRB approved study. We excluded patients who were non-English and non-Spanish speaking or too ill to interview. We recorded interviews, which were then transcribed and translated into English by a contracted agency. We analyzed our interviews using a framework approach, which included a set of a priori codes from the literature as well as emerging codes from patient responses. We will check a sample of our transcripts for coding consistency (aiming for an inter-rater reliability of > 80%). **DISCUSSION/SIGNIFICANCE OF IMPACT:** We recruited a diverse group of patients that were demographically representative of those who gained insurance under the ACA (childless adults making less than 138% of the Federal Poverty Level). Our preliminary results (based on 17 transcripts), suggest that patients, regardless of insurance type have difficulty accessing primary care. We identified seven domains under the broader theme of barriers to accessing primary care: finding a primary care clinic or physician (PCP), getting timely appointments, geography and transportation, continuity of care, using the Emergency Department (ED) or urgent care as a PCP, switching PCPs or clinics, and cost or coverage.

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Chicago Kids Advisory Board: A novel approach to engaging adolescent students in pediatric clinical research

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OBJECTIVES/SPECIFIC AIMS: Stakeholder engagement has been proposed to help realign clinical and translational research with the needs of clinicians, patients, and policymakers. Increasingly, funders and researchers seek to partner with stakeholders to inform study design, execution and dissemination of results. Kids and families Impacting Disease through Science (KIDS) is a program of the American Academy of Pediatrics that seeks to engage youth in clinical research. United States KIDS programs participate in International Children's Advisory Network activities. The Chicago KIDS Advisory Board program at Walter Payton College Preparatory School, a Chicago Public School, was initiated in 2015 to foster and develop interest in careers in science, research and healthcare and provide youth perspectives to academic and industry researchers on the design and development of pediatric research studies. This project engaged youth advisors in creation and evaluation of a video explaining clinical research and informed consent for Ann & Robert H. Lurie Children's Hospital, a clinical partner of the Northwestern University Clinical and Translational Sciences Institute. **METHODS/STUDY POPULATION:** The Payton program advisory board sessions are 1.5hr interactive seminars held on 1–2 school days each month. During the 2016–2017 school year, students participated in 3 stakeholder sessions, led by Lurie Children's hospital researchers, to advise development of a script, storyboards, and ultimately an animated video that informs children and families about participation in clinical research to aid in the decision-making process. Qualitative research methods were used to examine attitudes towards clinical research and assess the video on content objectives, clarity of concept, and appropriateness for a pediatric audience. Following production, students from the 2017–2018 advisory board viewed the final video and presurvey and postsurvey were administered to assess the effect of video on the comprehension of 8 key concepts of informed consent on a 5-point Likert scale. The Wilcoxon signed-rank test was used to compare median pretest and post-test ranks. Results of this analysis were reviewed in seminar and students provided written contribution to this abstract. **RESULTS/ANTICIPATED RESULTS:** In total, 11 Walter Payton high school students participated in video development and 27, who were naïve to development, participated in the pre and post evaluation sessions. Students ranged from Freshman to Seniors and reflected the diverse ethnic and racial background of Chicago. A positive change from pre to post-test survey was observed in all questions presented assessing comprehension of key concepts of

informed consent. The median post-test ranks were statistically significantly higher than the median pre-test ranks for all questions ($p < 0.01$ in all). **DISCUSSION/SIGNIFICANCE OF IMPACT:** Chicago KIDS youth advisors were engaged in all aspects of the design of the research tool and gained experience in stakeholder contribution from study design to evaluation and publication. The students will next be involved in the design of a prospective randomized study to test the efficacy of the video compared with standard recruitment and consent practices. Given the difficulty of recruiting youth for clinical trials, development of effective engagement practices is critically important. Our findings demonstrate the feasibility of utilizing youth advisors in a public school based setting.

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Childhood adversity, attachment style, and home visiting engagement

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OBJECTIVES/SPECIFIC AIMS: This case-control study aims to determine the relationships among childhood adversity, attachment style, and the likelihood of accepting or declining a referral for HV. The study will serve as a pilot to inform the power analysis of a subsequently proposed full-scale study. **METHODS/STUDY POPULATION:** Using a case-control study design, 25 women who decline HV referral (cases) will be compared with 25 women who accept HV referral (controls) on their exposure to childhood adversity and attachment style. Women who are eligible for the study are English-speaking mothers who have been offered HV services by Health Care Access Maryland. Surveys are administered in-person, either in the participant's home or at another location (e.g., public library), based on participant preference. The dependent variable is participant's verbal response to the HV referral (accept/decline). The independent variable, childhood adversity, will be measured using the Philadelphia Urban Adverse Childhood Experiences (ACEs) Survey and the Attachment Style Questionnaire (ASQ). Control variables include demographics (i.e., age, race, education, employment, housing, marital status), obstetric history (i.e., previous preterm birth, miscarriage, fetal death, infant death, abortion), and current psychosocial risk factors (i.e., history of substance use, intimate partner violence, depression). Descriptive comparisons will be done for the independent and control variables in controls versus cases. Bivariate analysis will examine associations between the odds of being a case and ACE score and ASQ score. Multivariate logistic regression models will be used to examine the relationship between ACE total and ASQ score; exposure to ACE in cases versus controls; and the odds of an avoidant and anxious attachment styles in cases versus controls. **RESULTS/ANTICIPATED RESULTS:** We hypothesize that (a) higher ACE scores will be positively associated with a higher level of avoidant attachment; (b) higher ACE scores will be positively associated with declining a HV referral; and (c) higher levels of avoidant attachment will be associated with declining a HV referral. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Racial inequities in birth outcomes are pervasive and unjust. Non-Hispanic Black women experience births that result in infant mortality, fetal mortality, preterm birth, and low birth weight babies at more than double the rate of non-Hispanic White women in Baltimore and nationally. Prenatal and early childhood home visiting programs have been found to decrease maternal smoking and hypertensive disorder which are associated with PTB, reduce closely spaced births which is associated with fetal and infant death, and improve women's long-term economic self-sufficiency, child health and social outcomes. However, as community-based programs, these services are not reaching the majority of eligible women in low-income urban settings—women who are also disproportionately burdened with poor pregnancy-related health outcomes. Considering the potential to improve outcomes, the importance of eliminating health disparities, and the national and local investment in HV services, it is vital to understand why some women are not enrolling in prenatal HV programs. The findings from this and subsequent studies will inform the translation of evidence-based HV program outreach efforts for women with complex social history. It will inform the design of enhanced outreach and engagement efforts of HV programs to more reliably engage women.

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Community-based research networks: Providing infrastructure for clinical and translational research in the State of Michigan

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OBJECTIVES/SPECIFIC AIMS: As the sole Clinical and Translational Science Award (CTSA) site in Michigan, the Michigan Institute for Clinical & Health

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.

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Community health workers as research advocates

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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 CTSAs for broad implementation.

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

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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