

low-income communities. These women face heightened health risks due to sedentary lifestyles, educational gaps, and socio-environmental barriers. This project targets the pronounced prevalence of allostatic burden in this population by applying a culturally sensitive, bottom-up approach. Our goal of incorporating healthy lifestyles to improve health in at-risk women and their families requires multiple projects. This project is a necessary first step in engaging with a community to identify local environmental circumstances and barriers to increasing the relevance of physical activity within the home. These barriers can then be addressed by adapting an exercise promotion program to the needs of this community. **DISCUSSION/SIGNIFICANCE:** Black women in under-resourced communities are more likely to be sedentary and have poor health. Exercise programs can be a powerful tool to address disparities and help prioritize health. The circumstances of women in public housing in Birmingham, AL, need community partners to adapt exercise engagement programs to meet environmental challenges.

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### **Association of premature birth with neurodevelopment delays in a cohort of Hispanic children exposed to the Neonatal Intensive Care Unit (NICU)**

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**OBJECTIVES/GOALS:** We aim to identify neurodevelopment delays among children who were born prematurely. We will also calculate the sensitivity and specificity of the assessment tools used to measure the neurodevelopmental profile in early childhood of children exposed to the Neonatal Intensive Care Unit (NICU). **METHODS/STUDY POPULATION:** This cross-sectional study will include 100 premature children who were born between 32 to 37 weeks of gestational age and admitted to NICU at the University Pediatric Hospital in Puerto Rico. Their neurodevelopment will be measured with the Bayley III. Statistical analysis will be performed using IBM SPSS Statistics 25.0. Descriptive statistics will be used, normality distributions among all continuous variables, frequency distribution for categorical variables and logistic regressions to test association of GA and neurodevelopment delay. We will use the raw item scores for each domain of the Bayley III assessments to measure internal consistency using Cronbach's alpha and factor analysis. **RESULTS/ANTICIPATED RESULTS:** We anticipate identifying the ND among children born prematurely between 32 to 37 weeks of gestational age and who were admitted to NICU at the University Pediatric Hospital in Puerto Rico. We also expect to find if gestational age impacts adversely ND in children who were born between 32 to 37 weeks of gestation. We will be able to assess if lower gestational age will impact global ND in contrast to higher gestational age neurodevelopment delays in one specific area of development. We will also be able to assess the sensitivity and specificity of the Bayley- III. **DISCUSSION/SIGNIFICANCE:** Premature is a major global health problem with a 12.0% prevalence. We want to promote early identification of ND in a diverse Hispanic Puerto

Rican population so we can guide public health decisions and lead research initiatives to improve outcomes in the future or facing prematurity.

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### **“How will I get there” Institutional guidance and support for research-related transportation to engage diverse participants from underrepresented populations**

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**OBJECTIVES/GOALS:** Transportation is a barrier to research participation, especially for participants from disadvantaged backgrounds. Our goal was to review existing policies and create recommendations for institutional guidance on research-related transportation to support a long-term birth cohort study. **METHODS/STUDY POPULATION:** To summarize existing institutional policies on research-related transportation (i.e., transportation of participants or research staff travel to/from research activities), we requested and, in addition, searched for such policies across 28 sites involved in the NIH HEAL Initiative's HEALthy Brain and Child Development (HBCD) study. The HBCD study plans to enroll 7,500 pregnant/postpartum persons, follow their children and families long-term, and assess factors influencing brain and child development. The obtained policies were then summarized, followed by identification of gaps in their recommendations and guidance. **RESULTS/ANTICIPATED RESULTS:** Outreach to the HBCD study sites and search of their institutional websites resulted in identification of 6 institutional policies or other guidance related to research-related transportation across five HBCD study sites. Three policies/guidance related to ride-share programs in research, two related to reimbursement for participant travel, and the fifth was about car seats. Through the online search, we also found policies or written guidance about employee-related transportation within 15 HBCD study sites in total; they largely pertained to employee business travel and did not specifically address research-related transportation. **DISCUSSION/SIGNIFICANCE:** To optimally support research teams, participants, and to promote the enrollment and retention of participants from diverse backgrounds, it is critical for research institutions to develop and implement guidance on research-related transportation and remove barriers to participation in research.

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### **Bridging Health Equity: A Model for Primary Healthcare in the Hamilton, Ontario's Keith Neighbourhood**

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**OBJECTIVES/GOALS:** A primary care clinic is opening in the Eva Rothwell Center (ERC) located in the Keith Neighbourhood of Hamilton, Ontario. This new clinic aims to address rampant health disparities in the community. Effective delivery of health services requires a robust model of care that meets and sustains the specific needs of the community and clinic providers. **METHODS/STUDY POPULATION:** The primary objective of this study is to describe the current health needs of Keith Neighbourhood residents. The secondary objective is to describe the needs of health providers working within the ERC health clinic. Data collection will involve the