

# 2025 ANNUAL MEETING ABSTRACT BOOK

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**School Instructional Choices and Mental Health Outcomes Post-Lockdown** Juan Echenique\* Juan Echenique, Brian Elbel,

Mental health is crucial to overall well-being and significantly impacts children's health and academic success. School-aged children are particularly vulnerable to mental health issues, with rising rates of anxiety, depression, and suicidal thoughts and behaviors. This paper examines the effects of the lockdown period on key mental health factors, including the choice between hybrid and fully remote instruction, the impact of school closures on hybrid students, and the changes experienced by students returning to full-time in-person schooling.

Focusing on New York City (NYC) students, we analyze the reopening of schools after the spring 2019-20 shift to remote instruction due to the COVID-19 pandemic. Parents and guardians could choose between blended learning (hybrid) or fully remote instruction during this period. By June 2021, about 40% of public school students opted for hybrid instruction, though the number of inperson instructional days varied by grade and school.

We use a unique longitudinal dataset that combines individual-level data on all NYC K-12 public school children. This dataset integrates healthcare usage from emergency department visits, hospital discharge data, Medicaid claims, and educational administrative records.

First, we estimate parents' preferences for hybrid learning during the 2020-21 school year. The dependent variable is if students are enrolled in hybrid learning; the value is zero otherwise. Independent variables include demographic characteristics (race/ethnicity, sex, and school grade), physical and mental health status, and spatial risk factors (neighborhood infection rates and travel time to school). Our results indicate that students with an emergency department visit primarily for mental health during the lockdown period are six percentage points more likely to enroll in hybrid learning. We also find significant differences across race and ethnicity. Older students have a higher probability of fully remote learning, while students in non-English-speaking households are more likely to choose blended learning.

We use an event-study design to assess the impact of school closures on hybrid students. This analysis compares students in hybrid learning before and after their shift to remote instruction between December 2020 and March 2021 for middle school students and between December 2020 and April 2021 for high school students. Our findings show that middle and high school female students in hybrid instruction experienced an increase in mental health-related emergency department visits and higher consumption of mental health-related prescriptions during closures. Further research will examine mental health effects based on the number of in-person instructional days (intensive margin).

Finally, we examine the differences in outcomes such as absenteeism, academic achievement, and mental health during the 2021-22 school year, when schools fully reopened, based on students' exposure to hybrid and remote learning. This paper contributes to our understanding of the long-term implications of COVID-19 restrictions and the impact of different instructional modalities on children's mental health. It also underscores the importance of mental health as a determinant of student choices, the role of uncertainty in mental health outcomes, and the costs and benefits of each instructional approach under varying circumstances.

Redefining Emotional Health: A Youth-Led Approach to Stress, Self-Awareness, and Coping in Rural Black Communities Leah Frerichs\* Leah Frerichs, Charity Lackey, Erin Dobbins, Tessel Peterson, Ellie Sellers, Patricia Norman, Doris Stith, Maria Zoco,

Emotional stress is a critical population health issue. Nearly half of US high school students experience persistent feelings of sadness or hopelessness. Unfortunately, there has been a failure to prioritize youth, especially those from rural Black communities, in this research. This is troubling since these youth are exposed to unique stressors. We intentionally built Young Visionaries for Health (YV4H) to be a safe, shared space for youth-led emotional health research. We trained and guided n=15 rural, predominantly Black youth to use systems science to redefine and understand their stress and coping needs. Through this process, youth redefined the problem of poor emotional health as one of "limited self-awareness". Furthermore, led by the youth, we conducted dyadic indepth interviews with n=23 youth and adult caregivers and two focus groups with community leaders. We analyzed qualitative data within the descriptive phenomenology paradigm and grounded in Black Feminist Theory in order to deeply describe youth experiences and elevate the embodied knowledge of Black youth and women. Our analyses further unpacked the meaning of "limited selfawareness" and uncovered that stress, self-awareness, and emotional control negatively reinforced each other. Further, this dynamic was embedded in a population context of high exposure to multiple forms of violence. The analyses also guided development of multi-level, co-created solutions. These included the need for widespread dissemination of novel and youth-relevant mindfulness practices and changes to institutional discriminatory and punitive in-school suspension policies. Our highly engaged, youth-driven approach led to novel and redefined understanding of emotional health. We are currently working with YV4H youth to use art and performance as a channel to disseminate their findings and generate support for their solutions in a way that reclaims their identity and voice in the process.

Community socioeconomic context and measles vaccination in Denmark: A multi-level analysis of initiation trends across eight population-based birth cohorts Richard Carpiano\* Richard Carpiano, Vibeke Christensen, Andrea Polonijo,

Despite extensive evidence that measles vaccination is effective, safe, and cost-beneficial, vaccination hesitancy has become a growing challenge to achieving and maintaining herd immunity against this highly infectious and harmful disease. Notably, the spread of misinformation regarding the necessity and side effects of measles vaccination-particularly the now-refuted (yet persisting) claim linking the vaccine to autism-has undermined uptake overall and across different socioeconomic status (SES) groups. Understanding such hesitancy requires considering the social contexts in which parents make health decisions. These contexts offer both opportunities to be informed and misinformed, as well as to either encourage or inhibit parents' choices concerning their children's health.

In the present study, we apply this perspective to examine how a child's receipt of their first Measles, Mumps, and Rubella vaccination (MMR1) varies by local community socioeconomic composition. We focus on Denmark, which has national health care and no vaccination mandates, yet SES disparities in child vaccinations and growing SES segregation by neighborhood, thus potentially pooling both infection risk and parents' vaccination beliefs.

Analyzing Danish national health registry data for eight birth cohorts (2008-15), we evaluate the extent to which (a) the concentration of residents by income and education in a family's local community (i.e., parish) influences a child's receipt of MMR1 (age 15 month) and (b) such association may vary over this time period that followed significant growth in anti-vaccine activism. To quantify possible parish effects of measles vaccine misinformation, we compare our findings for MMR1 with those for a child's receipt of their Diphtheria, Tetanus, and Pertussis (DTP) vaccination at 12 months. Unlike MMR1, DTP coincides with a well-baby consultation at their medical doctor and home visits by a health nurse.

Expanding the Scope of School-Based Mental Health Services: Addressing Adolescent Depressive Symptoms and Happiness Soobin Kim\* Soobin Kim, Orion Mowbray, Jihee Woo, Esther (Seol Ju) Moon,

Adolescent mental health is a growing concern in the United States, with rising depressive symptoms and declining happiness over the past decade. Schools serve as critical intervention points, offering accessible environments to address social determinants of health (SDOH) through connections with students, families, and communities. School-based mental health services (SBMHS) integrate social workers, counselors, psychologists, nurses, and educators into interdisciplinary support networks. However, SBMHS face persistent challenges, including stigma surrounding mental illness and misconceptions that they are primarily linked to crisis events.

This study examines (1) SDOH associated with depressive symptoms and happiness among high school seniors and (2) the influence of SBMHS on these outcomes. Using nationally representative data from the 2022 and 2023 Monitoring the Future surveys, two hierarchical regression analyses (N=2,574 for depressive symptoms; N=2,844 for happiness) explore the influences of SBMHS alongside SDOH at multiple levels: social context (COVID-19 period), community/school (city size, school type), peer (friends' substance use), and family (parental education, living arrangements, siblings), while controlling for individual demographics.

Findings reveal that attending school in medium-sized cities (vs. small cities) and having more friends who use substances are associated with higher depressive symptoms and lower happiness. Higher parental educational attainment and living with both parents serve as protective factors, particularly against depressive symptoms. Crucially, SBMHS are significantly associated with both reduced depressive symptoms and enhanced happiness. By integrating happiness—an emerging but underexplored dimension of adolescent well-being—this study pushes the boundaries of school mental health research. It underscores the need to expand SBMHS not only to mitigate distress but also to actively enhance adolescent well-being.

Health Effects of the 2021 Earned Income Tax Credit Expansion on Young Adults Without Children Abdinasir Ali\* Abdinasir Ali, Emily Dore, Rita Hamad,

In 2021, Congress expanded the earned income tax credit (EITC)—the largest US poverty alleviation program—to previously ineligible young adults without children. The EITC improves health by targeting poverty as a social determinant of health, but no studies to our knowledge have examined the health effects of the 2021 expansion on this newly eligible group in this key period of the lifespan. We evaluated the health effects of the 2021 EITC expansion among young adults without children. This guasi-experimental analysis used 2021-2023 serial cross-sectional data from the Behavioral Risk Factor Surveillance System (N=28,521). Using differences-in-differences and event study models, in which (newly eligible) young adults aged 18-24 years without children were considered exposed, and those aged 19-35 years (already eligible) were unexposed. We compared those interviewed during the EITC expansion to those interviewed before the expansion and after its expiration. Our outcomes included days of poor mental health in the past 30 days, days of poor physical health in the past 30 days, and health behaviors such as exercise and binge drinking in the past 30 days. We also calculated a standard binary measure of mental health for whether individuals had 14+ poor mental health days in the past 30 days ("frequent mental distress"). Models adjusted for self-reported demographic covariates. The 2021 EITC expansion was associated with fewer poor mental health days (-1.06, 95%CI: -1.92, -0.21). Event study models confirmed this and suggested improved physical health. There were no effects on other outcomes. Effects were similar among various subgroups (i.e., sex, race/ethnicity). Results were robust to sensitivity analyses. Expanding the EITC again may improve the wellbeing of young adults without children, a group often left out of US safety net programs during this key juncture of their life course. This study informs ongoing policy discussions on state and federal poverty policies.

Association between a Citywide Ban on Syringe Distribution and Provision of Other Harm Reduction Services and Syringe Litter in Pueblo, Colorado Katherine LeMasters\* Katherine LeMasters, Pranav Padmanabhan, Paul Christine, Jarratt Pytell,

Background: While syringe service programs (SSPs) provide harm reduction services proven to reduce overdose and infection-related morbidity and mortality among people who use drugs, political backlash towards harm reduction programs has grown. In Summer 2024, Pueblo, Colorado (population 110,000) instituted a three-week ban on syringe distribution, citing syringe litter. In partnership with one of two large SSPs in Pueblo, we sought to evaluate changes in (1) total SSP participation, (2) naloxone distribution, and (3) syringe litter associated with the temporary ban.

Methods: With SSP and Pueblo Department of Parks and Recreation data (January 1, 2024 – September 26, 2024), we conducted Interrupted Time Series analyses using segmented linear regression and two interruption points, the city council vote to ban syringe distribution (May 13, 2024) and resumption of syringe distribution (June 6, 2024).

Results: In January 2024, there were, on average, 229 participants served, 114 naloxone kits distributed, and 160 discarded syringes collected weekly. During the ban, there was an average weekly decrease of 31 participants (95% CI: -48, -15) and 23 naloxone kits (95% CI: -34, -12). After the ban, while there was an immediate (54, 95% CI: -11, 119) and sustained (5, 95% CI: 2, 9), weekly increase in participants and an immediate (48, 95% CI: 5, 91) and sustained (3, 95% CI: 0, 5) increase in naloxone kits, yet, neither returned to pre-ban levels in three months thereafter. There were no changes in syringe litter.

Conclusion: The temporary ban on syringe distribution had no effect on syringe litter – the impetus for the ban – and was associated with decreases in community naloxone distribution and in participants visiting the SSP during and after the ban. Policymakers must consider adverse consequences on community health, including decreased access to evidence-based overdose prevention measures like naloxone, when placing limits on harm reduction organization activities.

Immigration Policy Climates and Birth Outcomes among Muslim immigrants in the United States Nafeesa Andrabi\* Nafeesa Andrabi, Goleen Samari,

Structural drivers of health inequities, including xenophobic and racist policies at the US state level, have the potential to affect many minoritized groups. Aggregate indices have been developed to examine state migration policy environments and health, yet these indices are rarely used to consider outcomes over time, by nativity, or by race/ethnicity. Muslim immigrants are a rapidly growing US population and face increasingly hostile conditions domestically and globally. They are exposed to structural- and individual-level racism, discrimination, and xenophobia, yet the health outcomes of Muslim immigrants in the US are understudied. This is in part because official data sources do not collect information on religion and Muslims do not neatly fit into institutionalized ethnoracial categories (i.e., Black or Hispanic) that drive most demographic research focusing on health disparities. Muslim immigrants intersect multiple categories of otherness (nativity, religion, and race) that may pattern their exposure to immigration policy-related stress and increase their susceptibility to poorer health outcomes than other population subgroups.

Linking data from the Immigration Policy Climate Index (IPC) that aggregates inclusionary and exclusionary state immigration policies to U.S. natality data and a novel methodological approach to identify immigrant Muslim mothers, we examine the relationship between state policy environments and birth outcomes from 2009 to 2022. We find that exclusionary state-level immigration policy contexts are associated with a higher risk of preterm birth and low-birth weight for South Asian Muslim immigrant mothers (i.e. from Pakistan and Bangladesh) but not for Middle Eastern/North African (i.e. from Syria or Egypt) or African Muslim immigrant mothers (i.e. from Somalia). The results highlight important differences in how racialized religion and race/ethnicity intersect to shape experiences with policy climates and contribute to birth outcome disparities.

Structural climate threat: state-level climate policy and population health Meredith Riley\* Meredith Riley,

Climate change is an immediate and escalating threat to U.S. population health. Prior work on climate change and health draws on the stress process perspective to theorize an association between acute climate stressors and a variety of health outcomes. However, these studies overlook the social and structural nature of climate change. The actions of nations, states, and corporations unequally distribute the consequences of climate change across populations. I address this gap in the literature by developing and testing a concept of "structural climate threat." I assess how U.S. states vary in their level of structural climate threat and ask if exposure to higher structural climate threat is associated with worse physical and mental health outcomes among residents of a state. Using health data from the Behavioral Risk Factor Surveillance System and a novel index of structural climate threat that captures state-level policies on emissions, renewable energy, transportation, infrastructure, and climate resilience, I expect to find that higher structural climate threat predicts worse self-rated health, more functional limitations and cardiovascular conditions, and poorer mental health. In an era of escalating climate change, this study broadens our conceptualization of climate threat to include the policy actions of U.S. states and demonstrates the health consequences of the social, political, and natural contexts that we live in.

Suicide deaths among reproductive-aged women in the US post-Dobbs: A national timeseries analysis Parvati Singh\* Parvati Singh, Alaxandria Crawford, Sarah Crow, Jonathan Powell, Maria Gallo,

Purpose: The United States Supreme Court's Dobbs decision in June 2022 may have worsened mental health among reproductive-aged women nationally. We examined whether the Dobbs decision preceded an increase in suicides among reproductive-aged women using national, monthly data, from January 2018-December 2023.

Methods: We retrieved national monthly suicide counts from January 2018 to December 2023 for women and men 15-49 years of age (overall and stratified by two age groups- 15-24 years, 25-49 years) from the Centers for Disease Control and Prevention's Wide-ranging Online Data for Epidemiologic Research Multiple Cause of Death database. We used time series analyses to examine whether residuals of nationally aggregated counts of monthly suicides among women 15-49, 15-24-and 25-49-years of age (outcomes) exhibited higher-than-expected values following the Dobbs decision, controlling for autocorrelation and concomitant monthly series of suicides among men.

Results: We observed higher-than-expected residuals of suicides in July and September 2022 among 15-49-year-old women and in September, October, December 2022 and March 2023 among 15-24-year-old women. No residual outliers were observed among 25-49-year-old women post-Dobbs. Results from time-series analyses indicate an average of 52.5 additional suicides in outlier months among 15-49-year-old women post-Dobbs (95% confidence interval [CI]: 14.85, 90.15). The increase appeared pronounced among younger age (15-24 years) women (coefficient = 19.6, 95% CI: 11.17, 28.03). Results suggest 104 additional suicides among 15-49-year-old women, and 78 excess suicides among 15-24-year-old women, nationally, post-Dobbs.

Conclusions: Findings highlight the adverse impact of the Dobbs ruling on mental health among reproductive-aged women.

**Health equity** 

Beyond Census Tracts: A GIS and Mobility Data Framework for Enhanced Measurement of Healthy Food Access and Environmental Exposures Mengya Xu\* Mengya Xu, John P. Wilson, Kayla de la Haye,

**Introduction:** Chronic diseases such as obesity are significantly influenced by diet, which depends partly on the accessibility of healthy foods. Traditional assessments of food access often neglect the nuances of individual travel patterns, shopping behaviors, and transportation methods. Such assessments, constrained by static administrative boundaries like census tracts, fail to capture the dynamic nature of environmental exposures.

**Methods**: This study introduces a comprehensive analytical framework integrating the "15-minute city" urban planning concept, and an activity space perspective, utilizing GPS mobility data and GIS analytics. We evaluate access to essential food retailers across various transportation modes—walking, public transit, and driving—at the household level and within residents' neighborhoods. Our approach includes a novel method to examine grocery shopping behaviors in dynamic activity spaces, shedding light on the interplay between food environments, mobility patterns, and socioeconomic characteristics.

**Results:** Our findings suggest that the distribution of healthy food stores does not consistently bypass socioeconomically disadvantaged communities. Public transit appears to enhance grocery store access mainly in areas with pre-existing walkable options, with limited effectiveness in regions lacking basic food access. Analysis based on mobility data shows that increased grocery visits correlate with neighborhoods having higher proportions of Hispanic populations, renters, and foreign-born residents, alongside a greater availability of grocery stores.

**Conclusion:** Our findings underscore the importance of GIS-based analytical methods in understanding grocery store utilization and influencing factors. These insights are crucial for targeted improvements in public transit and urban policies, aiming to bridge gaps in food access and ensure more equitable availability of healthy food options across all communities.

#### **Structural factors**

A conceptual framework for investigating measures of neighborhood-level structural racism developed through academic and community collaboration Mindy DeRouen\* Mindy DeRouen, Meera Sangaramoorthy, Deirdre Johns, Palama Lee, ILA McDermott, Scarlett Gomez, Loic Le Marchand, Melinda Aldrich, Lani Park, Iona Cheng, Salma Shariff-Marco,

**Background**: Recent commentaries have called for more detailed conceptual frameworks that guide new data collection, study design, and analytic strategies for research of neighborhood structural racism and its impact on health inequities. We are developing a robust framework that applies nuance and precision to existing models to inform causal inference studies.

**Methods**: A draft conceptual framework has gone through multiple rounds of discussion among our academic/community collaboration comprising project investigators and community scientists residing in California, Hawai'i, and Tennessee. The framework is currently being vetted in an epidemiological study of structural racism on lung cancer outcomes and in a study to assess the impact of new racial- and ethnic-specific indices of structural racism on life expectancy.

**Results**: Our framework includes factors that characterize domains of the process of structural racism (e.g., mortgage lending, policing, voting) and neighborhood-level consequences of structural racism (e.g., employment, food environment, air pollution), which guided selection of variables to consider for structural racism indices. Incorporating insights from community scientists, the model integrates neighborhood strengths, including social cohesion, shared norms, and culturally and linguistically relevant resources, that may protect against the harmful consequences of structural racism. Our framework builds upon existing models to hypothesize causal relationships between these risk and resiliency factors in addition to illustrating their downstream effects on health, which is informing causal inference approaches in both studies.

**Conclusions**: Our academic/community collaboration has resulted in productive discussions focused on (1) further specifying the mechanisms of causal relationships among and across domains of neighborhood factors and with individual-level factors and (2) adapting the overarching model to specific racial and ethnic populations.

**Health equity** 

DISCO (Developing Information-sharing Standards through Community): Using a Deliberative Democracy Process to Elicit Community Members' Input on Data-Sharing Practices Connor Emmert\* Connor Emmert, Meghan Peterson, Rebecca Zimba, Honoria Guarino, Sarah Kulkarni, Mary Irvine, Denis Nash,

**Background:** DISCO was a deliberative democracy project spearheaded by the NYC Department of Health to develop transparent client-driven guidelines for future implementation of Data to Suppression (D2S). D2S is a surveillance-based HIV reporting initiative flagging virally unsuppressed clients for follow-up by their Ryan White HIV/AIDS Program housing and behavioral health service providers. Deliberative democracy is a community engagement framework for involving citizens in developing policy on ethically complex problems. In this DISCO case study, we outline steps in the planning of a robust deliberative democracy process.

**Methods:** Working closely with community liaisons and service providers, we recruited clients who had been or could be directly affected by D2S. Facilitator preparation included training on cultural humility and health equity. Sessions were held in an accessible building well served by public transit. We held informational sessions on D2S, HIV surveillance, and state law and regulations governing person-level HIV data sharing by health departments. All activities and materials were fully bilingual, including live translation/interpretation of sessions. Participants' feedback was collected as part of discussions throughout the sessions and in questionnaires at the end of each session.

**Results:** Session One in February 2024 engaged 37 clients in policy statement development. Session Two, held in March 2024 with 32 of those 37 clients, included deliberation and voting on the draft policy statements. Over 94% and 100% of participants in Sessions One and Two, respectively, either Agreed or Strongly Agreed (on a 5-point Likert scale) that the sessions were a good use of their time and that their recommendations would help to guide policy.

**Conclusion:** DISCO's deliberative democracy framework led to high community engagement, discussion, and consensus-building. Participants felt their voices were heard and their feedback would have an impact on policy.

#### Methodological approaches to studying public health

Participatory Action Research and Arts-Based Methods to Explore Intersectional Violence in Buenaventura, Colombia Kati Hinman\* Kati Hinman,

**Introduction:** Community-led interventions have been shown to sustainably reduce interpersonal and community violence. Participatory Action Research is a useful tool for community members to build and strengthen innovative responses to violence. On Colombia's Pacific Coast, Buenaventura is a city shaped by a long history of armed conflict and civilian resistance. Working with Afrodescendent and indigenous LGBTQ+ people, who navigate overlapping forms of violence in their daily lives, this research used Participatory Action and arts-based methods to facilitate the identification of systems perpetuating violence, understanding of its impact on their well-being, and their resilience strategies.

**Discussion**: LGBTQ+ participants began by identifying the most important issues in their lives, including armed conflict, unemployment, discrimination, and poor mental health. The group agreed on discrimination as an overall lens to examine the violence and rejection they've experienced in various spaces like school, work, public spaces, and at home with family. They learned methods of photovoice, interviewing, and mapping to document how and where discrimination and violence occur and its impact on mental health and coping practices. They wrote short stories about LGBTQ+ people like them and created art pieces about their resilience and building of inclusive peace.

**Conclusion:** The methods allowed participants to pull from diverse ways of knowing and generate an analysis of their experiences of violence, rejection and exclusion. It strengthened their collective and led to ideas for solutions, like a Care House for women and LGBTQ+ people. Through a close partnership with a grassroots peacebuilding organization, participants and I used a human rights framework to present results in Buenaventura and to 11 national and international entities in Bogotá. These outcomes reflect the tradition of building collective memory in Colombian social movements to organize for social change.

#### Methodological approaches to studying public health

Innovating Quantitative Intersectional Methods to Identify Mental Health Disparities from Adolescence to Adulthood Talia Kieu\* Talia Kieu, Deshira Wallace,

Those with multiple marginalized identities are more likely to experience severe chronic depression than those with a single or no marginalized identities. The Intersectionality Framework suggests that individuals' overlapping social identities, referred to as social location, yield varying levels of risk and protective factors. Mixed findings on depression disparities may be due to a focus on the influence of multiple identities in isolation (additive effects), rather than social locations (intersectional effects). This study aims to conduct 3 cross-sectional analyses to estimate the % of variability in depression attributable to the intersectional (between-group) effects vs. additive (within-group) effects of sex, racialization, sexual orientation, and socioeconomic status across the life course. I analyzed Waves 1 (adolescence), 4 (young adulthood), and 5 (adulthood) of the National Longitudinal Study of Adolescent to Adult Health (n=12,160). Using the novel Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy (MAIHDA) approach, in which individuals are clustered in social location groups (akin to geographic locations), I constructed a cluster variable comprised of 24 unique combinations of identities listed above. For each wave, I estimated the % of variance attributable to between-group differences in a baseline model, and a model adjusted for additive effects. The remaining variance after accounting for the additive effects of these identities represents their intersectional effects. In preliminary analyses, 6.21%, 7.81% and 8.33% of the total variance in depression is attributable to the intersectional effects of social identities in adolescence, young adulthood, and adulthood, respectively. By using multilevel modeling, this study overcomes the limitations of traditional additive approaches. Findings will have implications for communityengaged research by tailoring mental health interventions to address intersectional vulnerabilities.

#### Methodological approaches to studying public health

### "Our knowledge and expertise are invaluable": Participatory Research with People Impacted by Incarceration Abaki Beck\* Abaki Beck,

Incarceration is a well established social determinant of health, and people who experience incarceration have worse health before, during, and after prison than the general population. Yet research on the health experiences and health outcomes of currently and formerly incarcerated people frequently excludes their voices and expertise. Our research team has been engaging with directly impacted community members in our work at the intersection of public health and legal system involvement for well over a decade. This presentation will provide concrete lessons learned from our community-engaged work, exploring questions like: How can we ethically engage formerly incarcerated people in data collection and analysis, particularly in a prison setting (e.g., if returning to a prison or interacting with prison staff is traumatizing)? How do we properly compensate community members, especially if there are limitations (e.g., they are currently incarcerated and cannot be paid per prison policy)? How can we convene a group of people with lived experience to guide our research with shared power and mutual benefit?

In particular, this presentation will draw from examples from our ongoing partnership with a Community Research Council of formerly incarcerated people who gave birth or were postpartum while incarcerated, who support multiple projects related to pregnancy and incarceration. One of the outcomes of this collaboration was the development of a resource guide and training with lessons learned and practical examples for how researchers can engage people impacted by incarceration in health research, from grant applications to data collection to dissemination of findings.

Through this presentation, participants will learn about the unique, systemic challenges to engaging people impacted by incarceration in health research, creative ways to overcome these barriers, and learn concrete examples from our work with people who experienced pregnancy in prison.

**Health equity** 

Theories of change in public health research: Implications for community & policy action Gabriel Schwartz\* Gabriel Schwartz,

Krieger (and others) have pushed public health researchers to think critically about theories of disease distribution, with an eye towards what counts as a "cause" and who is accountable for health inequities. In contrast, very little attention has been paid to public health researchers' theories of change – i.e., how we theorize that our methods and findings might actually improve the public's well-being. Public health researchers almost never articulate our theories of change in scientific writing; instead, articles usually implicitly suggest that policies and practice will change if powerbrokers are simply informed of the latest scientific findings. Communities on the front lines of public health crises are thus only indirectly involved in theorized change processes.

In this talk, I revisit major theories of change from social science, suggesting that the currently dominant theory in public health research (a liberal reform approach) limits the field's impact. Specifically, dominant theories conceptualize policy action as being driven by the opinions and individual decisions of legislators or business leaders who must be convinced to change course via evidence and persuasion. Yet this leaves public health researchers at a loss when policymakers who do not value public health come into power.

Alternative theories of change (i.e., various Marxist or anarchist approaches) instead posit that policy action is driven by struggles between classes, and by communities forging networks of care. These theories point to the importance of dissemination strategies that reach lay audiences, the coproduction of knowledge with political movements of oppressed peoples, and of conceptualizing organized communities of everyday people as the primary stakeholders capable of fostering health justice. We discuss places where public health researchers are already following these alternative approaches, as well as the importance of explicitly theorizing not only our theories of disease distribution but also our theories of change.

#### **Place/Communities**

Mapping Power to Plan Effective Public Health Interventions Tricia Miranda-Hartsuff\* Akilah Collins-Anderson, Patricia Y. Miranda-Hartsuff, Monique Green Jones, Eric Kessell, Maggie Graham, Akilah Collins-Anderson, Ali Abazeed, Malak Kabalan, Patricia Wren,

**Background**: The Communities in Context Project was formed in Greater Detroit to identify effective strategies for conducting community-engaged and tailored public health interventions centered on power structures. **Methods**: From June 2023-February 2024, a community-academic partnership convened representatives from twelve local organizations and implemented a 4-phase process to identify power structures and available community assets related to mental health and housing. The 4 phases were: (1) community-engaged creation of power and asset mapping instruments; (2) facilitated community conversations to identify Detroit-area "players" and their power to "get the work done" (e.g. powerful supporters, powerless opponents); (3) systematic cataloguing of assets collected from identified players; and (4) community convening to validate learnings to date. Results: The power mapping process identified 394 unique "players" (e.g., organizations, institutions, public figures) working in the mental health and housing sectors. Asset mapping further identified nearly 1,000 distinct resources that were systematically cataloged based on the frequency of their mention. Subsequently, 19 people representing greater Detroit mental and housing participated in a community convening to discuss and validate findings. Participants' responses ranged from surprise to strong endorsement when specific government agencies and organizations were identified as "powerful opponents" of mental health and housing efforts. However, there was broad consensus around the essential and positive efforts undertaken by individual-level counseling and supportive housing services, which were frequently described as "powerless supporters." Conclusions: Power affects intervention success and organizational stability. Powerful funders could benefit non-profit organizations working in mental health and housing by realigning their grantmaking to support collaborative, not duplicative, efforts.

#### **Structural factors**

For People Who Read Dangerously: On Epistemic Violence, (Creative) Resistance, and the Future of Population Health Ryan Petteway\* Ryan Petteway,

"When our worlds are literally crumbling, we tell ourselves how right they may have been, our elders, about our passive careers as distant witnesses" Edwidge Danticat

Epistemic violence is a cornerstone of much population health training and research. This is discernible within dominant population health research practices that (re)generate singular damage-centered narratives of communities situated at the margins as "vulnerable" and "at-risk". These practice norms are established/perpetuated by curricular/accreditation guidelines within which matters of epistemology and power—what counts as knowledge, whose knowledges count, who gets counted, who does the counting—are omitted from so-called "foundational" competencies. These standards have systematically silenced ways of knowing/knowledges embodied by those at the margins, impeding collective understanding and suppressing narratives with the potential to disrupt power relations that drive health inequities. These dynamics fundamentally confound population health training/research—constraining our imaginations and curtailing our capacities/demands for social action. Further compounding these matters are explicit acts of state-sanctioned violence, silence, and erasure committed by the current political regime intended to render those at the margins invisible. As population health educators/scholars, we must ask ourselves-will we simply bear witness from a distance? Or will we choose to teach/train for those who read dangerously?

In this spirit, I engage critical, Black feminist, and decolonial theory to outline a population health "for people who read dangerously"—with a focus on pedagogy/training. Drawing from notions of "creating dangerously" and "fugitive pedagogies", I discuss applications of creative and decolonized approaches within my own teaching and research that center considerations of epistemic justice. In doing so, I articulate a vision for population health futures within which every syllabus/research manuscript is written for those who know what it means to live and die (prematurely) in the struggle for health justice. That we must teach, research, and write dangerously for our future selves to read dangerously.

#### **Structural factors**

Neoliberal deregulation: what is it and why it matters for US population health inequities Maren Spolum\* Maren Spolum,

A growing body of literature investigating the commercial determinants of health has documented the public health harms perpetrated by large corporate actors across the U.S. The power that these large corporate actors are able to wield results from a counterrevolution against market consolidation waged by neoliberal academics beginning in the mid-1940s. This presentation will share a historical analysis of how the current landscape of consolidated market power across almost every sector of U.S. society is the result, in part, of their actions. Additionally, the presentation will then trace how dominant firms' economic power allows them to also concentrate political power, which has been wielded to further undermine the governmental bodies charged with regulating the industry practices, specifically those protecting safety, health and the environment. I will then share a set of proposed pathways by which neoliberal deregulation has eroded democratic governance by supporting the concentration of private power, and the ways in which American consumers, communities and ultimately their health are harmed within this environment of excessive concentration & deregulation.

#### Mental health/function

Exploring Mental Health Outcomes by Sexual Orientation, Race/Ethnicity, and Rurality Christie Caruana\* Christie Caruana, Gabe Miller,

Lesbian, gay, and bisexual (LGB) individuals report poorer mental health compared to their heterosexual counterparts; health patterns vary by race/ethnicity, and individuals residing in rural areas exhibit a mental health disadvantage. Despite extensive research examining mental health patterns along sexual orientation, race/ethnicity, or rural/urban status, few studies have examined how these three characteristics intersect to pattern mental health. Using 2019-2022 National Health Interview Survey (NHIS) data (n=115,228), this study examines the prevalence of three measure of mental health: psychological distress, anxiety symptoms and depressive symptoms, along sexual orientation, race/ethnicity, and rural/urban intersections. Our results indicate that straight individuals report better mental health relative to LGB adults, regardless of race/ethnicity and/or rurality. Further, while we observe racial/ethnic variation in mental health patterns among straight individuals, we observe little racial/ethnic variation in mental health patterns among LGB groups. Finally, these patterns vary by urban/rural status. Our findings provide a more nuanced understanding to mental health patterns along intersections of sexual orientation, race/ethnicity, and rurality.

**Health equity** 

Everyday and Healthcare Discrimination at the Intersection of Age, Gender, Race, Ethnicity, and Sexual Orientation Delvon Mattingly\* Delvon T. Mattingly, Meman Diaby, Luis Zavala Arciniega, Carrie B. Oser, Shyanika W. Rose,

**Background**: Discrimination is characterized as unfair or unjust mistreatment based on perceived or observed social identity or phenotypical traits. We used a visualization tool to display a detailed characterization of the prevalence of everyday and healthcare discrimination at the intersection of age, gender, race, ethnicity, and sexual orientation.

**Methods**: We used imputed data from the All of Us Research Program (version 7) on adults aged 18+ years (n=117,688) to estimate the prevalence of the continuous Everyday Discrimination Scale (EDS) (range: 0-5) and Healthcare Discrimination Scale (HDS) (range: 0-4). We calculated mean discrimination estimates for the EDS and HDS for each possible combination of age (18-29, 30-49, 50+ years), gender (male, female), race and ethnicity (Hispanic, non-Hispanic [NH] White, NH Black, NH multiracial, NH Asian), and sexual orientation (heterosexual, LGB+), and compared across mean estimates using ANOVA.

**Results**: The mean EDS and HDS were 0.80 and 0.57. Groups with the highest levels of EDS were NH Black LGB+ men aged 18-29 years (mean: 2.07, 95% CI: 1.80-2.34) and NH multiracial LGB+ women aged 30-49 years (mean: 1.73, 95% CI: 1.64-1.81). Groups with the lowest levels were NH White heterosexual men aged 50+ years (mean: 0.56, 95% CI: 0.55-0.56) and NH White heterosexual women aged 50+ years (mean: 0.61, 95% CI: 0.61-0.62). Groups with the highest levels of HDS were NH Black heterosexual women aged 18-29 years (mean: 1.46, 95% CI: 1.40-1.51) and NH Asian heterosexual women aged 18-29 years (mean: 1.22, 95% CI: 1.19-1.26). Groups with the lowest levels were NH multiracial heterosexual men aged 18-29 years (mean: 0.37, 95% CI: 0.32-0.43) and NH White heterosexual men aged 50+ years (mean: 0.43, 95% CI: 0.42-0.43).

**Conclusions**: Our findings highlight specific groups most and least at risk of experiencing mistreatment in their daily lives and healthcare settings, informing existing public health policy and prevention efforts.

#### **Structural factors**

Cissexism and the Structural Vulnerability Framework to Understand Housing Instability Among Transgender and Gender Diverse Populations Katrina Kennedy\* Katrina Kennedy, Jennifer Glick, Danielle German,

Transgender and gender diverse (TGD) populations experience a disproportionate burden of housing instability compared to cisgender peers. The structural vulnerability framework has been used to explain how systems of oppression drive health inequities among TGD populations but has not been applied to housing experiences. In response to community-identified priorities, we conducted a qualitative study on housing instability, safety, and services among racially/ethnically diverse TGD adults in Baltimore City who had experienced housing instability. The study was designed and conducted with active leadership by TGD team members and community advisors. Between July 2022 and December 2023, we completed 32 semi-structured lifeline interviews. Thematic analysis revealed that cissexism shapes housing contexts through policies and practices within institutions and programs (e.g. binary gendered dorms, exclusionary application processes, transphobic staff) and housing assistance (e.g. requiring matching gender markers on identity documents). Participants' experiences demonstrated that cissexism not only directly shapes housing contexts, but also drives co-occurring and mutually reinforcing structural vulnerabilities across the eight domains of the structural vulnerability framework: financial security, residence, risk environment, food access, social network, legal status, education, and discrimination. The structural vulnerability framework provides a critical lens to identify how cissexism shapes housing instability across multiple domains. Findings highlight the urgent need for interdisciplinary, coordinated action in local responses and population-level prevention efforts. Recognizing these interlocking vulnerabilities reveals multiple intervention points where policy change and resource redistribution - e.g. reducing administrative barriers in public assistance and strengthening legal protections - can support housing stability and overall wellbeing for TGD populations.

#### Life-course/developmental

'Yeah, it was bad. But I'm tough. And they didn't know I was tough': An Exploratory Qualitative Analysis of Life Stressors among older Black Americans in St. Louis Akilah Collins-Anderson\* Akilah Collins-Anderson.

**Objective**: Qualitatively explore and provide an account of major stressors identified in the life narratives of older Black Americans. Methods: This analysis used 2017-2018 data drawn from the St. Louis Personality and Network study and applies a life course perspective lens. Thematic analysis was conducted to identify patterns in life narratives interviews of a random 20% sample of Black participants (N= 48). Data analysis involved an iterative process (i.e., continuous development of new codes and constant comparison of themes) using NVivo. **Results**: The analysis revealed three dominant stressors throughout the narratives: illness, death of loved ones, and family. It further uncovered health-related challenges (e.g., frustration and mistrust towards medical professionals, burdens of caregiving) as well as contextual stressors (e.g., lack of guidance from older kin, discrimination, and influence from the church). Thematically, the findings are presented as: confronting major health challenges and loss, embracing faith and returning amidst adversity, and forging mental fortitude and mindset. **Conclusion**: The narratives provided insights into older Black individuals' perspectives and personal experiences regarding stressors. These findings underscore the necessity for mental health researchers to consider the intersecting factors that Black Americans encounter throughout their lives that can significantly affect their mental well-being. Additionally, the results indicate that further investigation into interconnected stress could offer a compelling explanation for why Black Americans might find it challenging to prioritize their mental health.

Aging

**Aging Through the Pandemic in Sub-Saharan Africa** Susan Elliott\* Satveer Dhillon, Isaiah Omondi, Diana Karanja, Elijah Bisung, Sarah Dickin, Kenneth Mugayehwenkyi, Justine Nagawa, Susan J. Elliott,

The COVID-19 pandemic directly and indirectly impacted older adults residing in low- and middleincome regions, such as Sub-Saharan Africa (SSA). Older women in SSA were disproportionately affected due to several compounding factors. For example, in SSA, older women are primarily responsible for household tasks, such as collecting water. Further exacerbated by the limited financial support available and the weak health infrastructure in place, older women are uniquely vulnerable. However, there has been limited research examining the effects of COVID-19 among older women residing in SSA. Hence, our research, conducted in partnership with local community partners, investigates the impacts of the COVID-19 pandemic and various determinants on the health and wellbeing of older women in Kenya and Uganda. Using surveys from 231 older women in Kenya and 211 older women in Uganda, we used a generalized linear model with a complimentary loglog link function to identify the factors associated with emotional distress, wellbeing, and health status. Our results indicated that less than 20% of older women in Kenya and Uganda had experienced an improvement in wellbeing post-COVID compared to during the pandemic. Further, there continues to remain a negative impact on emotional distress levels, which is associated with several variables such as water insecurity and lower access to capital. In terms of health status, those who had health insurance, believed they had access to good quality healthcare and had the ability to make decisions in purchasing large household items had better perceived health. Our key recommendations address both direct and indirect pandemic impacts. These include strengthening household gender dynamics, advocating for greater government support, and ensuring that older women's voices are heard when generating tailored solutions. By doing so, older women living in SSA can receive the support they need, especially during future public health crises.

**Aging** 

An intersectional analysis of birth cohort trends in activity limitations among U.S. adults before midlife Natalie Rivadeneira\* Natalie Rivadeneira, Natalicio Serrano, Joanna Maselko, Ganga Bey,

Studies of birth cohort trends for various health outcomes have demonstrated poorer health in more recent birth cohorts. Few studies have considered how race and gender intersect to shape lived experiences that can impact birth cohort differences. This study uses an intersectionality approach to evaluate birth cohort trends in activity limitations among adults aged 30-45. We estimated cohort effects for activity limitation prevalence using cross-sectional data from the National Health Interview Survey between 1973 and 2016. We conducted an Age-Period-Cohort (APC) analysis using the median polish approach to calculate the prevalence ratios (PR) estimating birth cohort effects. We then calculated stratified estimates for race and gender (i.e., Black and White men and women). The overall prevalence of activity limitations among individuals aged 30-45 was higher in more recent birth cohorts than the earliest cohorts identified in the study. The cohort effect was 1.86 (95% CI: 1.07-3.29) for the 1983-1986 birth cohort relative to referent 1943-1946 birth cohort. When stratified by race and gender, this cohort effect was only seen in White men. Conversely, the prevalence among White women in the same cohort was significantly lower compared to the referent cohort. For Black men, significant cohort effects were pronounced in individuals born between the late 1940s and mid-1950s. There were no significant cohort effects for Black women, however Black women had higher prevalence across time periods and age groups relative to White Women. Modeling race/ethnicity and gender separately obscures important differences in activity limitation trends across populations, undermining efforts to develop effective interventions for promoting equity in healthy aging. Findings highlight the importance of an intersectionality approach to understanding health inequities.

Aging

Early Life Educational Environments and Cognitive Health: The Role of Formal and Informal K-12 Contexts in Later-Life Cognitive Functioning Kimson E. Johnson\* Kimson E. Johnson, Maddison Linker,

#### Introduction

Formal and informal education environments intersect with structural factors, reflecting a history of structural racism and racial inequities in K-12 education. Though research often emphasizes educational attainment, there are gaps in understanding how diverse early educational exposures shape cognitive health. This study investigates how varied formal and informal K-12 educational experiences shape episodic memory in later life.

#### **Methods**

This study uses data from the Health and Retirement Study 2015-2017 Life History Mail Survey and 2020 Core survey. Latent class analysis identified distinct profiles of formal (n=6,201) and informal (n=5,880) K-12 educational environments among adults 50+. Informal factors include parental education and home literacy resources (i.e., number of books), while formal factors include school racial composition (White vs. non-White) and school type (Public, Private, Diverse). Episodic memory was measured using a composite score of immediate and delayed recall. Covariates include childhood health, number of siblings, and family financial situation. Linear regression examined the association between latent class and episodic memory scores.

#### **Results**

Four latent classes emerged for informal factors and three for formal factors. For formal factors, respondents who attended diverse K-12 schools with a majority White student population had higher episodic memory ( $\beta = 0.60$ , p<.01), while those in majority non-White public schools had lower episodic memory scores ( $\beta = -0.47$ , p<.05). For informal factors, even in book-filled homes, individuals with moderate ( $\beta = -0.83$ , p<.001) and lower parental education ( $\beta = -1.27$ , p<.001) had lower episodic memory. Episodic memory was lower for those with low parental education and no books at home ( $\beta = -1.92$ , p<.001).

#### **Conclusions**

Understanding these pathways is crucial for informing interventions that promote cognitive health equity across diverse educational environments.

Allostatic load change from first trimester to post-pregnancy differs by self-identified race/ethnicity Mitali Ray\* Mitali Ray, Zhirui Deng, Robert Silver, Philip Greenland, Lynn Yee, George Saade, William Grobman, Rebecca McNeil, Dianxu Ren, Janet Catov,

Pregnancy is a cardiovascular stress test that can identify individuals with accelerated cardiovascular disease (CVD) progression, which is the leading cause of death. Racial disparities persist in adverse pregnancy outcomes and accelerated CVD. Allostatic load (AL) is a quantitative, physiological measure of "wear and tear" on the body from chronic stress that may be a driver of racial disparities and CVD, as systemic inequities contribute to differential stress exposures. Our study evaluated AL change from the first trimester to post-pregnancy according to the social construct of race.

This is a secondary analysis of the nuMoM2b-Heart Health Study, a prospective cohort of a geographically diverse, nulliparous population followed 2-7 years after delivery. We computed AL scores (N=4,508) using 11 biomarkers (pulse pressure [first-trimester] or heart rate [follow-up], albumin, CRP, BMI, creatinine, glucose, HDL, insulin, LDL, total cholesterol, triglycerides). We applied the count-based approach where we assigned 1 for high-risk and 0 for healthy ranges (<25th percentiles for albumin, HDL, and creatinine; >75th percentiles for all other biomarkers) and total AL score was the sum of these individual risk scores (range: 0-11) for each timepoint. We computed AL change overall and by self-identified race/ethnicity (NH-White: 2,801; NH-Black: 624; Hispanic: 736; Asian: 135; Multi-racial: 212) and performed paired t-tests.

While AL decreased significantly in the overall sample from first trimester to 2-7 years later (mean change  $\pm$  SD: -0.30 $\pm$ 2.02, p<0.001), mean AL decreased significantly among NH-White (-0.43 $\pm$ 2.00, p<0.001) and Asian (-0.62 $\pm$ 1.93, p<0.001), but not NH-Black (0.09 $\pm$ 1.93), Hispanic (-0.11 $\pm$ 2.11), or Multi-racial (-0.08 $\pm$ 2.18) participants. Our results suggest a partial reduction of allostatic load following pregnancy. Variations by race/ethnicity reveal that some groups may have a blunted post-pregnancy stress recovery that could contribute to accelerated CVD risk.

Community-Engaged Evaluation of Maryland's Medicaid Doula Program: Policy Lessons and Pathways Forward Shelby Wyand\* Shelby Wyand, Teneele Bruce, Leigh Goetschius, Karey Sutton, Sana Ghafoor Rahman, Asli McCullers, Kelsey Lyons, MaryAnn Mood, Melissa Eckroade, Jessica Galarraga,

**Objective:** This study, led by MedStar Health Research Institute, The Hilltop Institute, and community advocates, evaluated the impact of Maryland's Medicaid Doula Program (MMDP), which offers doula services at no cost to beneficiaries using a mixed-methods, community-engaged design.

**Methods:** Quantitative analysis tracked MMDP utilization, while qualitative thematic analysis of 28 key informant interviews (policy leaders, health care providers, managed care organizations (MCOs), perinatal health equity advocates, and community-based doulas) identified strengths, barriers, and actionable recommendations. A community co-investigator and advisory board (CAB) ensured that those most affected guided the evaluation, fostering trust and relevance. Member checking and CAB feedback validated qualitative findings.

**Results:** Doula services were used throughout the perinatal period, primarily by Black birthing individuals in urban areas with high social vulnerability. The MMDP improved birthing experiences, increased access to doula care, and fostered collaboration among MCOs and community-based doulas. Policymaker responsiveness led to iterative improvements, though challenges remained, including doula shortages, low reimbursement rates, administrative burdens, and gaps in obstetric care integration. The limited inclusion of doula input in the initial program design contributed to barriers, highlighting the importance of meaningful community engagement and interdisciplinary collaboration.

**Conclusions:** The MMDP demonstrates how Medicaid-funded doula services can advance maternal health equity by increasing access for low-income birthing individuals. Maryland's leadership set a national example, influencing policy changes such as new billing codes to streamline reimbursement. Moving forward, interdisciplinary collaboration is essential to reduce administrative barriers, ensure competitive reimbursement, and integrate doula care into maternity services to strengthen perinatal health outcomes.

The association between racial discrimination and preterm birth subtype by education Ashley Judge\* Ashley Judge, Christina Ludema, Kelli Ryckman,

Black women have the highest rates of preterm birth (PTB) in the US. Racial discrimination and depression are associated with PTB among US Black women. Few studies have examined the association between racial discrimination and PTB subtype.

This study assessed the association between lifetime racial discrimination and PTB with and without mediation by depression. We used 2010-2013 data limited to 1214 women who self-reported non-Hispanic Black race/ethnicity from a prospective cohort study of nulliparous women recruited from eight clinical, US sites. Racial discrimination was measured by the Experiences of Discrimination scale. We used conditional log-binomial regression (CLR) to estimate the association between racial discrimination and 1) PTB (<37 weeks gestation), 2) spontaneous PTB (sPTB) and 3) medically indicated PTB (mPTB) adjusted for age, income, education, and marital status. We stratified by education to assess effect modification.

Approximately 42% of women experienced ≥1 situations of racial discrimination, which varied by age and education ( $\leq$ high school:  $\sim$ 30%,  $\geq$  bachelors: 70%). Racial discrimination was not associated with PTB. CLR models revealed a J-shaped relationship with sPTB. Compared to none,  $\geq$ 3 situations of racial discrimination were associated with 1.7 (95% CI: 1.0, 3.1) times the risk of sPTB, and 0.4 (0.2, 1.0) times the risk of mPTB. Estimates were strongest among women with some college education (OR=3.7 (95% CI: 1.5, 9.0)).

Our null results for PTB differ from other studies. However, this study offers new insights into the particularly strong association between racial discrimination and sPTB for women with some college education.

Adolescence Post-Dobbs: A Policy-Driven Research Agenda for Minors and Abortion Julie Maslowsky\* Julie Maslowsky, Laura Lindberg, Emily S. Mann,

**Methods:** We convened a 35-member expert consensus panel, who represented five different constituencies- social science and public health researchers, clinicians, policy and legal experts, community organization leaders, and youth. These convenings were supplemented by synthesis of existing research and tracking of relevant laws.

**Results:** First, we created a comprehensive catalog of local, state, and federal policies impacting minors' access to abortion. We classified policies into five categories: access to information, conditions of clinical services, practical support, parental involvement, and privacy issues. Second, we described four key overarching challenges to research on adolescent abortion access policies. Third, we developed an actionable research agenda on minors and abortion. Finally, we detailed specific methodologies to answer these questions and suggest data that may be used to answer some questions (and where new data are needed to answer others).

**Conclusions**: The lack of research on minors is an equity issue and a liability to the field as we attempt to inform evidence-based policies on reproductive health. This presentation will address the challenges to doing SRH research with minors, how to overcome them, the importance of research on minors, and a research agenda to move us toward evidence-based policy.

#### Social/relational factors

Technology-facilitated intimate partner violence and young adult mental health Michelle Livings\* Michelle Livings,

Recent work emphasizes technology-facilitated intimate partner violence (TFIPV) as a concerning trend for population health, particularly among adolescents and college students. In this study, I use data from the Future of Families and Child Wellbeing Study (FFCWS), the only contemporary survey of a birth cohort of young adults, to explore associations between TFIPV and mental health outcomes.

I focus on 1,100 young adults in the year-22 FFCWS survey who reported that they were in a serious relationship, engaged, or married. Experience of TFIPV is the binary predictor of interest, defined as a respondent reporting at least one of the following behaviors: their partner pressured them to "sext," to respond quickly to texts or calls, or to share their location; their partner shared their naked photos with other people without permission; their partner logged in to their social media or email without permission; their partner posted a mean public message about them on social media. Logistic regression results show that experience of TFIPV is associated with depression (OR=1.5, 95% CI 1.1-2.0), but not anxiety, among the full study sample. This association is driven by the young women in the sample: young women who experienced TFIPV have higher odds of both depression (OR=2.4, 95% CI 1.6-3.6) and anxiety (OR=1.8, 95% CI 1.0-2.9), while these associations are not statistically significant among young men. These results are also robust when models are adjusted for reported experience of physical IPV.

This study adds to the growing literature suggesting that TFIPV is negatively influencing mental health among younger populations. These findings emphasize the need for mental health interventions that encourage healthy boundaries among intimate partners in a world where individuals – and relationships – are increasingly dependent on technology.

#### Social/relational factors

Discrimination in Healthcare is Associated with Myocardial Infarction Risk in Middle-Aged and Older Adults Michael Green\* Michael Green, Ann Marie Navar, Emily O'Brien, M. Alan Brookhart, Roland Thorpe, Matthew Dupre,

Discrimination in healthcare has the potential to strain patient-provider relationships and may negatively impact quality of care across multiple clinical domains. We evaluated the association between discrimination in healthcare and myocardial infarction (MI) risk using data from the Health and Retirement Study (2008-2020), a nationally representative longitudinal dataset of middle-aged and older US adults (mean follow-up=7.3 years). The sample included 17,254 Non-Hispanic Black (18.8%), Hispanic (7.6%), and Non-Hispanic White (73.6%) adults aged 50-90 at baseline. MI events during follow-up were ascertained from participant-reported diagnoses of MI by a doctor (mo/yr). Discrimination in healthcare was assessed by asking respondents how often they received poorer treatment from doctors or hospitals compared to others; for analysis, responses were recoded to a 0-4 scale (higher = more frequent discrimination). Covariates were measured at baseline and included sociodemographic background (gender, race, ethnicity, education), healthcare utilization (doctor visits, hospitalizations), smoking status, and disease diagnoses (diabetes, hypertension, prior mi). Cox proportional hazards models were used to estimate the risk of MI during follow-up (n=765events, 4.4% of the population). A sensitivity analysis accounting for the competing risk of all-cause mortality was conducted. In adjusted models, perceived discrimination in healthcare was associated with an increased risk of MI (Hazard Ratio=1.14, P=0.002, 95% Confidence Interval=1.05-1.25). This was consistent with results from competing risk models (Subdistributional Hazard Ratio=1.13, P=0.006, 95% Confidence Interval=1.01-1.43). More research is needed to understand the potential mechanisms by which discrimination may increase the risk of MI and ultimately develop effective strategies to mitigate its harm among middle-aged and older adults.

#### **Social/relational factors**

Vicarious trauma: A pre-post analysis of exposure to a racially motivated mass shooting and adverse birth outcomes in South Carolina Abigail Kappelman\* Abigail Kappelman, Annie Ro, Andrea Henderson, Michael Smith, Claire Margerison, Nancy Fleischer,

**Introduction**: We hypothesized that the mass shooting of Black churchgoers in Charleston, SC on June 17, 2015, constituted a racialized exogenous shock that would increase low birth weight (LBW, <2500g) and preterm birth (PTB, <37wks) in SC, with greater effect size for Black vs. White pregnant women and for women in Charleston County vs. the rest of SC.

**Methods**: We estimated the association between exposure to the event and adjusted odds of LBW and PTB using singleton birth certificates from SC from 2012-2016. Exposed infants were in utero on June 17, 2015 (estimated month of conception Sept 2014-June 2015); controls were in utero during the same periods the two years prior. Logistic regressions were adjusted for month and year of conception, trimester on event date, maternal race and age, and infant sex. Effect modifiers were maternal Black/White race and residence (Charleston Co./the rest of SC).

**Results**: We found no association between exposure and LBW (aOR 1.08 [95%CI 0.96-1.21]) or PTB  $(0.99 \ [0.89\text{-}1.11])$  in the entire state (n=104471); associations did not differ by maternal race (both F test p>0.05). In Charleston Co. (n=9398), exposure was associated with higher odds of LBW (aOR 1.70 [95%CI 1.16-2.50]); this association did not differ by race (F test p>0.05). We did not find an association between exposure and PTB in Charleston Co. (aOR 1.29 [95%CI 0.90-1.86]) nor differences by race (F test p>0.05). In the rest of SC, though we found no overall association (LBW aOR 1.04 [95% 0.92-1.17]; PTB 0.97 [0.87-1.09]), we found a marginally harmful association for Black women only (LBW exposed x NHB aOR 1.12 [95%CI 1.01-1.24]; PTB exposed x NHB 1.12 [1.02-1.24]).

**Conclusion**: Though we found no overall association of exposure to the mass shooting on birth outcomes in SC, we found a significant association between the racialized "shock" and LBW for all pregnant women in Charleston Co., and between exposure and LBW and PTB for pregnant Black women only in the rest of SC.

#### Social/relational factors

It's Who You Know: Bridging Ties in Low-Resourced Neighborhoods and Maternal and Infant Health Tim Bruckner\* Tim Bruckner, Brenda Bustos, Samantha Gailey,

**Background:** Recent influential work in the US finds that bridging capital (i.e., friendships across socioeconomic strata) increases upward economic mobility over the life course. The potential role of these social connections on health, especially in low-income communities, remains relatively unexplored. We exploit a recent effort which made publicly available ZIP-level measures of bridging capital using Facebook information on >70 million Americans. We test in California (8 million births; 2005 to 2021) the relation between ZIP-level bridging capital on two perinatal health outcomes: fetal death and infant death. We focus on residents in ZIP-codes with very low median household incomes (HHI) as well as ZIP-codes with a high share of Black households—neighborhoods in which risks of fetal and infant death remain very high.

**Methods:** Generalized estimating equation methods controlled for individual-level covariates (e.g., maternal age, education, and public/private insurance type) as well as spatial clustering of observations.

**Results:** In ZIP-codes with the lowest quartile of HHI, we find strong protective associations between bridging capital and fetal and infant death. A one-standard deviation increase in bridging capital corresponds with a reduced odds of fetal death (odds ratio [OR]=0.75; 95% Confidence Interval [CI]: 0.70 to 0.80, p<.001) and a reduced odds of infant death (OR=0.87; 95% CI: 0.82 to 0.93, p<.001). In ZIP-codes with the highest quartile of Black households, results similarly show strong and protective associations (OR for fetal death: 0.76, and OR for infant death: 0.79, all p<.001). Analyses restricted to Black persons only further show protective associations.

**Conclusions:** The potential of bridging ties (i.e., friends across socioeconomic strata) in promoting maternal and infant health, especially in neighborhoods with unacceptably high levels of fetal and infant death, should warrant much more scholarly consideration than it currently receives.

# Non-health institutions (business, political, education systems)

Race- and Gender-Specific Educational Trajectories and Cardiometabolic Health Kelsey Shaulis\* Kelsey Shaulis,

Educational attainment is positively linked to physical and mental health outcomes throughout adulthood. Despite a large body of evidence supporting the strong linear relationship between educational attainment and health, inconsistencies in this relationship have emerged throughout levels of sub-baccalaureate education. For midlife and aging adults in the U.S., the postsecondary education landscape was expanding rapidly as they graduated high school, and the educational requirements for expected lifestyles were beginning to rise throughout their young adulthood. As a result, starting a postsecondary education "off-track" or returning to education in later adulthood was not uncommon. The additional costs, financial and social, of returning to education in adulthood combined with a shorter period to accrue the socioeconomic benefits of additional education, may inhibit the strength of the relationship between the degree attained and midlife health outcomes. Using longitudinal data from High School & Beyond (N ≈ 8,650), the current study identifies agebased, race- and gender-specific trajectories through postsecondary education that extend from high school through midlife. Trajectories are established within highest degree level and include subbaccalaureate credentials such as certificates and associate degrees. The resulting educational trajectories are used to explore the relationship between varying educational pathways and cardiometabolic health outcomes (obesity, hypertension, and diabetes) in midlife. Controls for key life course events (e.g., marriage and/or marriage dissolution before highest degree, childbirth before highest degree, military service prior to age 25, spells of unemployment, and labor market changes to expected occupations) are included.

## Life-course/developmental

Same Start, Diverging Destinations: Associations between State Mortality Contexts and Health in Midlife among Siblings Christine Percheski\* Christine Percheski,

Health is impacted by the full constellation of characteristics of a place, including public health policies, health behaviors, and health care infrastructure, but also economic conditions, social cohesion, social support, environmental toxins and resources, carceral policies, and more. To better isolate the causal effects of place on health, we compare the self-rated health (SRH) of siblings who lived in the same place in childhood but resided in different states for at least some of the years between the ages of 18 and 49. To do this, we use data from the Panel Study of Income Dynamics (PSID) for years 1968 to 2021 for all individuals with at least one sibling in the dataset who were observed around age 50 (n = 2334). For every year of observation, we link individuals to the prevailing age-adjusted all-cause mortality rates (from the CDC) in their state of residence. Our analytic sample is comprised of the 756 individuals who had moved out of the state of their childhood and had a sibling who had also moved out of their childhood state. In ordinal logit models predicting self-rated health at age 50, we find a small but statistically significant effect of number of years of living in a state in the quintile with the highest age-adjusted mortality rates on self-rated health at age 50. Based on our estimates, living for 23 years in a state in the highest mortality quintile (compared to all other states) between the ages of 18 and 50 has the equivalent effect on self-rated health as being assigned male rather than female at birth. Perhaps surprisingly, we do not find that the number of years lived in a state in the quintile with the lowest age-adjusted mortality is a statistically significant predictor of self-rated health at age 50. These preliminary results suggest that, for health at mid-life, improving conditions in the states with the highest all-cause mortality rates would have the largest impact on population health.

## Life-course/developmental

Childhood Food Autonomy and Household Income: A Longitudinal Examination of Their Influence on BMI from Adolescence to Early Midlife Haotian Zheng\* Haotian Zheng, Muntasir Masum.

#### Introduction:

Previous research has demonstrated a significant relationship between income and body mass index (BMI), with income inversely related to BMI. Beyond income, food choice also plays a crucial role in determining BMI. This study investigates how childhood autonomy influences an individual's BMI throughout their life. Additionally, childhood household income is used as the baseline income for effect measure modifiers.

## Methods:

This study used publicly available data from Waves I, IV, and V of the National Longitudinal Study of Adolescent to Adult Health, with a sample size of 3,713. The outcome variable was time-varying BMI, while the main exposure was time-invariant (baseline) food autonomy during childhood. Generalized estimating equations (GEE) were used to examine whether autonomy's impact on BMI varied across three different income groups.

#### Results:

Individuals who had food autonomy exhibited a slightly higher mean BMI across the three waves: 0.5 units in Wave I, 0.1 in Wave IV, and 0.1 in Wave V. Preliminary results indicate that among individuals in the low-income group at baseline, those with food autonomy had a BMI 1.8 units higher than those without food autonomy. However, no statistically significant relationship was found in the middle-income group.

# Conclusion:

Food autonomy affects individuals' BMI in the low-income group. Controlling for numerous time-varying variables from adolescence (Wave I) to early midlife (Wave V) led to attrition and reduced the sample size. Future research should explore groups beyond low-income individuals to determine whether the lack of statistically significant findings arises from unaccounted-for covariates or if no genuine association exists.

## Life-course/developmental

American Dreaming? Evaluating Trait Explanations for Health Inequalities by Race and Socioeconomic Status Bruce Link\* Bruce Link, Ezra Susser, Pam Factor-Litvak, Barbara Cohn,

In the context of strong cultural beliefs associated with the American Dream, a prominent body of scholarship asserts that traits like intelligence, self-confidence, and self-control play a pivotal role in the life-course emergence of health inequalities by race and socioeconomic status. Two claims are made. The first has been considered and debated for guite some time and asserts that traits like these are critical for educational and economic success - they lead to higher socioeconomic attainment. The second is that good health can be achieved, and disease avoided by exercising such beneficial traits in health-relevant circumstances across the life course - they lead to better health (Calvin et al. 2011, Deary 2020; Heckman 2006, Heckman 2013, Oi and Alwin 2017, Wraw, Deary, Gale, and Der 2015). While this two-part explanation of health inequalities has been prominently proposed as policy ready, strong supportive evidence is lacking. We use prospectively ascertained data from approximately 50-year-old Black and White study participants (N=605) whose mothers were recruited when they were pregnant with the participant. The data contain the requisite prospectively assessed measures of cognitive and non-cognitive traits (at age 9 and 15) as well as health, and socioeconomic status assessed across the life course. As such the data allow a strong test of trait explanations for health inequalities. Results show no evidence that traits are independently associated with adult health when adult SES is controlled or that they account for race or SES inequalities in health. Even though the American Dream idea assigns great prominence to individual traits results indicate a need to question claims that they are prominent in creating health inequalities across the life course.

# Life Course Exposure to Local Racial Income Inequality and Individual Health Outcomes: Zero Sum, Universal Harm, or Countervailing Forces? Anna Shetler\* Anna Shetler,

At country, state, and metropolitan levels, income inequality predicts population health and health disparities. However, research at smaller geographical scales is limited. I contribute to the literature by testing how life course exposure to Census tract income inequality is related to health outcomes. Previous research at the neighborhood level has focused on colorblind income inequality, finding null results for Blacks. I study *racial* income inequality between Black and white residents – an estimate of exposure to local structural racism.

Places with high structural racism may benefit whites ("zero sum"), harm whites ("universal harm"), or have no effects among whites. Thus, for white Americans, health in racially-unequal places – places where Black incomes are substantially lower than white incomes – may be (1a) better, (1b) worse, or (1c) similar to white health in racially-equal places. Second, I compare Black and white health to assess disparities. Black health may (2a) decline slower, (2b) decline faster, or (2c) be similar to white health in racially-unequal places. Third, I stratify models by gender.

I use the Panel Study of Income Dynamics (1980-2019) to estimate group-based trajectory models. Preliminary results show that Black Americans live in more racially-equal places over time while white Americans remain in white-biased, racially-unequal neighborhoods. For IAPHS 2025, I will use the trajectory groups to predict distal health outcomes. Physical health outcomes may require chronic exposures to inequality whereas mental health outcomes may be short-term, so the dependent health variables include self-rated health, cardiovascular disease, psychological distress, and mental health diagnoses. Sensitivity analyses will assess racial income inequality at county and state levels. I will also compare findings using the Gini coefficient to evaluate differences between racially-explicit and general income inequality measures.

## **Health systems**

Community Trust in Health Care and Medical Research: Insights from Project ENTRUST Survey Michael Green\* Michael Green, Jessica Sperling, Perusi Muhigaba, Nadine Barrett, Salimah El-Amin, Annie Tsui, Cindy Canty-Dumas, Stella Quenstedt, Dane Whicker, Keisha Bentley-Edwards,

Trust in health care organizations is essential for improving health equity. We aimed to describe community trust in a regional academic medical center, Duke Health. We designed an online crosssectional survey that will be implemented every 5 years to identify perceptions of the trustworthiness of Duke Health care and research. Participants were adults who were 1) local community members, 2) patients, 3) employees, and/or 4) local community-based organizations. Measures included self-reported demographic characteristics (e.g. race, ethnicity, age, gender identity, sexual orientation). Outcomes included trust in Duke health care, medical research, community partnerships, and negative experiences or discrimination. The survey, launched in 2023, yielded 6,167 respondents. They were 94.9% patients, 34.5% community members, 27.3% employees, and 6.3% community-based organizations. On average, respondents reported that Duke Health is trustworthy as a health care system and as a research institution; however, bivariable analyses revealed significant mean differences in health care trust by respondent demographics, with higher trust observed among those who were older, White, Asian, non-Hispanic, female, financially stable, and insured. 33% reported negative experiences or discrimination. Interactions with health care personnel were the most prevalent factor influencing trust and distrust in health care and research. 21% of respondents felt that their healthcare provider was not listening to them. Community-based organization respondents without personal involvement in Duke Health partnerships had more positive perceptions of Duke Health than those with prior partnership experience. Our survey tool and process can serve as a model to assess trust and trustworthiness across large regional health care systems. A translation-to-action plan is underway to implement recommendations.

#### Health care/services

# Racial Differences in the Use of Personal Health Technologies to Improve Shared Decision Making in Healthcare Fatima Fairfax\* Fatima Fairfax,

Personal health technology (PHT) can enhance population health and health equity by promoting health behaviors, tracking symptoms, and equipping patients with greater health literacy and agency in clinical encounters. Notably, PHT can improve shared decision making (SDM) between providers and patients, leading to improved healthcare interactions and treatment outcomes. While universally beneficial, PHT has the potential to address healthcare disparities that disproportionately affect marginalized racial groups.

I examine if PHTs influence SDM across racial groups and whether perceived health literacy (PHL) mediates this relationship. Using nationally representative data from the 2022 Health Information National Trends Survey, I apply logistic regression to examine the relationship between two PHTs, wearables and health apps, on SDM for Asian, Black, Hispanic, and white adults. I assess PHL using a measurement model and evaluate its mediating role with path analyses.

In the full population, health apps increase the odds of SDM by 19% at p<0.05, while wearables are only significant at p<0.1. Disaggregated by race, only white patients show increased SDM at the p<0.1 level for both technologies. PHTs were significantly associated with increased odds of PHL among all races, and PHL was associated with increased SDM. This indirect effect through PHL was significant for all races. In contrast, wearables only increased PHL for Asian and white patients, with significant indirect effects on SDM only in these groups.

These findings suggest that PHTs enhance SDM primarily by improving patients' sense of health literacy, with health apps appearing more universally effective than wearables. The lack of effect of wearables for Black and Hispanic patients is concerning, given their lower rates of positive patient-provider interactions and health outcomes. Further research is needed to address racial disparities in PHT effectiveness and promote health equity.

**Health systems** 

Considering Catholic Health Care: Exploring Perceptions of Trust and Discrimination in Religiously Affiliated Health Systems Margaret Tait\* Margaret Tait, Robert H. Brehm, Zach Johnson, Kerrissa Macpherson,

**Background:** This project explores whether the religious affiliation of health systems is evident to potential patients, and if health systems' religious affiliation affects perceptions of the quality of care they will receive, decisions to seek health care, and trust in providers. As of December 2024, 13 of the 20 largest health systems in the U.S. were religiously affiliated. We focus specifically on Catholic hospitals and Muslim Americans, a population not considered in previous research on religiously affiliated health systems.

**Method:** Data from this study come from a series of questions asked on the NORC AmeriSpeak Omnibus in January 2025. We conducted thematic analyses of an open-ended response item assessing if the religious affiliation of a hospital was evident. Additionally, we implemented a Latent Class Analysis (LCA) of data from separate questions to identify distinct subgroups based on their perceptions of discrimination in religiously affiliated health care.

**Results:** Preliminary results of the open-ended item reveal that many respondents were not aware of the religious affiliations of health systems, suggesting this may not be evident to potential patients. Importantly, Muslims in our sample appear to notice religious affiliations in a material way that other groups do not. From the LCA, Muslim Americans were overrepresented in the group that perceived high levels of discrimination in Catholic hospitals. While 23.1% of the overall sample was classified into this group, 38.3% Muslims were classified into the group.

**Conclusion:** Understanding how Muslim Americans, as a religious minority, perceive religious affiliation and its impacts on health care can offer important insights into broader patterns of trust and bias in health care delivery. These findings will help uncover how religious affiliation may influence health care seeking-behavior, offering a foundation for further exploration of how such dynamics may impact access and experiences for different patient groups within the U.S. health care system.

#### Health care/services

Barriers faced by primary care physicians when discussing cannabis-based treatments for chronic pain Biyyiah Lee\* Biyyiah Lee, Riley Wegryn-Jones, Arie Shaw, Kevin Boehnke, Bhaavna Yalavarthi, Sia Rajgarhia, Catherine Kilda, Amy Bohnert, Vivian Kurtz, Pooja Lagisetty, Rachel Bergmans,

Background: Cannabis availability is increasing through legalization efforts, and over a million Americans use it for chronic pain management despite limited evidence. Our community-engaged research program revealed patients' interest in discussing their cannabis use for pain with primary care providers (PCPs). However, barriers exist, and PCP interactions involving cannabis are not always informative or positive, as views on cannabis's therapeutic potential for chronic pain vary.

Aim: We aimed to identify factors influencing PCP discussions with patients regarding cannabis for pain management.

Methods: This qualitative study involved semi-structured interviews with PCPs in Michigan treating adults with chronic pain and specializing in internal medicine, family medicine, or geriatrics. Interviews explored cannabis-related knowledge, patient encounters, and pain management strategies. We used an adapted Rigorous and Accelerated Data Reduction technique to develop preliminary themes.

Results: We completed 15 interviews (93.3% MDs, 6.7% DOs, experience ranging from 1-27 years in practice), and we identified 4 preliminary themes: 1) prescribing uncertainty due to limited guidelines, evidence, and FDA-approved treatments, 2) practical barriers from time constraints, competing priorities, and lack of training, 3) community and institutional endorsement shaping provider support, decision making, and legal concerns, and 4) stigma-driven bias.

Next Steps: We plan to conduct 5-10 additional interviews to achieve data saturation and seek feedback on our data interpretation from representatives of the study population.

Conclusions: This community-engaged research highlights the need for targeted educational interventions to address provider uncertainty, systemic barriers, and stigma in cannabis-based pain management. Strengthening clinical guidance, institutional support, and training may improve provider confidence and facilitate evidence-based discussions to improve pain care.

# Reproductive health

Stakeholder Perspectives on Barriers and Facilitators to Breast and Cervical Screening among Hispanic women in Indiana Mrithula Suresh Babu\* Mrithula Suresh Babu, Layla Claure, Maria Isabel Viteri Suarez, Natalia M. Rodriguez,

**Introduction** - Disparities in incidence and mortality rates of women's cancers persist among medically underserved and minority populations in the United States. Hispanic/Latina women are less likely to have routine breast and cervical cancer screening. The level of acculturation plays a major role in screening and treatment adherence among Hispanic/Latina women.

**Methods** - Stakeholders from community-based organizations such as Young Women's Christian Association (YWCA) and Latino Center for Wellness and Education (LCWE) were recruited using snowball sampling. In-depth interviews with fourteen stakeholders were carried out to understand the stakeholders' knowledge of breast and cervical cancer, and their perspective on barriers and facilitators to breast and cervical cancer screening. The interviews were coded using NVivo and key themes were identified using the thematic analysis approach.

**Results** - The main themes identified from this study include 1) discrepancy in the focus on women's cancers, 2) insurance coverage as a factor, 3) motivators for Hispanic/Latina women to avail screening exams, 4) steps taken by Hispanic/Latina women to address illness and 5) preferred forms of health communication.

**Conclusion** - Breast cancer campaigns and initiatives gain a lot more attention when compared to cervical cancer and additionally there are a number of barriers to avail screening exams. Study findings can be used to develop interventions to improve access to breast and cervical screening, thereby improving screening rates among Hispanic/Latina women in Indiana.

Race/Ethnicity

**Suicidal ideation, assets, and race in U.S. adults from 2023 to 2024** Catherine Ettman\* Catherine Ettman, Priya Dohlman, Rajesh Satpathy-Horton, Sandro Galea,

Limited evidence exists on whether race modifies the link between assets and suicidal ideation. Using longitudinal data on a nationally representative sample of U.S. adults collected in Spring 2023 and 2024 (CLIMB study, N=1,863), we used multiple logistic regression to estimate the 2023 predictors of suicidal ideation in 2024, adjusting for age, gender, and race and ethnicity. 2) We tested for effect modification by race by estimating the fully adjusted model stratified by each race/ethnicity group and models with interactions between race and financial, physical, and social assets. In survey-weighted logistic regressions, income was significantly associated with higher odds of suicidal ideation in the following year (\$0-\$45,000 income relative to \$150,000+ income: OR=2.5 [95% CI 1.2, 4.9]), although all other financial and physical assets were non-significant for the overall group. Low social support was associated with higher odds of next year suicidal ideation [OR=3.0, (95% CI 2.3, 4.0). Models stratified by race showed a negative association between some financial (income, savings) and social (education) assets with suicidal ideation among White non-Hispanic participants but not among Black or Hispanic persons. While income was protective for White groups against suicidal ideation, income was not protective for Hispanic groups. We found no evidence of differences in the association between income and suicidal ideation for Black versus White groups in interaction terms. Some financial assets appeared to be protective against suicidal ideation for non-Hispanic White persons but not for non-Hispanic Black or Hispanic groups. Social support was consistently associated with reduced suicidal ideation with no significant difference in the protective effect across race groups. Financial assets may have different mental health protection for White versus Black or Hispanic populations. Social support is the most consistently protective asset across groups.

#### Mental health/function

Pandemic-Related Social Determinants of Health Profiles and Their Association with Children's Mental Health Outcomes: An ABCD Longitudinal Study Yunyu Xiao\* Yunyu Xiao, Michael Liu, Timothy Brown, Katherine Keyes, J. John Mann,

Objectives: Identify distinct social determinants of health (SDOH) risk profiles during the COVID-19 pandemic and evaluate their associations with children's mental health outcomes.

Methods: ABCD Study version 5.1 data (2020–2022) from 5,337 children impacted by pandemic-related disruptions in schooling, healthcare, economic stability, and food/housing security were analyzed. Latent class analysis identified risk profiles, and logistic regression examined their associations with mental health outcomes, adjusting for age, race, and sex.

Results: Four distinct classes emerged: Class 1, Severe Deprivation (n=478; 7.4%), had the highest wage loss, healthcare disruptions, lowest telehealth utilization, and highest food insecurity. Class 2, Low Impact (n=2743; 51.4%), had minimal wage loss, food insecurity, and healthcare disruptions. Class 3, High Delay (n=1122; 21.0%), experienced substantial healthcare delays and school closures. Class 4, Mild Deprivation (n=994; 18.6%), had notable wage loss and food insecurity but received stimulus support. Class 1 primarily included low-income, racially minoritized children, while Class 4 consisted largely of middle-class families from suburban and rural areas. Class 1 had the highest immediate suicide attempt risk at pandemic onset (OR=3.30, 95% CI: 1.96-5.47), whereas Class 4 exhibited the highest suicide risk post-onset (OR=1.62, 95% CI: 1.15-2.27), compared to Class 2.

Conclusions: Severe deprivation at COVID-19 onset correlated with immediate suicide risk, while mild deprivation predicted higher post-pandemic risk. Expanding telehealth and equitable care access in suburban/rural regions are critical for pediatric suicide prevention post-pandemic.

#### Health care/services

Medical debt and foregone mental health care due to cost among U.S. adults, 2023-2024 Kyle Moon\* Kyle Moon, Katherine Miller, Sandro Galea, Catherine Ettman,

Background. There is a substantial treatment gap for mental health care in the U.S. that may be exacerbated by medical debt.

Methods. This study analyzes data from the COVID-19 and Life Stressors Impact on Mental Health and Well-Being (CLIMB) study, a nationally representative, longitudinal panel of U.S. adults. The exposure was past-year medical debt, self-reported in 2023. The outcome of interest was the probability that individuals did not see a mental health care provider when they wanted to in the past year due to cost, measured in 2024. We lagged the exposure to account for the temporality of medical debt and forgone care. Sampling weights were used to account for sampling probabilities and nonresponse. We fit a series of logistic regression models that predicted the probability of foregone mental health care as a function of medical debt and report results as average marginal effects.

Results. Among 1,821 adults, 276 (15.3%) reported medical debt, of whom 121 (6.4%) incurred <\$1,000,107 (6.1%) incurred \$1,000-\$4,999, and 48 (2.8%) incurred  $\ge\$5,000$ . Any medical debt was associated with a 17.3 percentage point (pp) increase in the probability of foregoing care [95% CI: 11.8, 22.8] in the next year, after adjusting for sociodemographic characteristics. Compared to those with no medical debt, <\$1,000 in medical was associated with a 11.7 pp [95% CI: 4.4, 19.0] increase, \$1,000-4,999 in medical debt was associated with a 17.6 pp [10.4, 24.7] increase, and  $\ge\$5,000$  was associated with a 28.1 pp [15.6, 40.6] increase in foregoing care.

Conclusions. There may be a dose-response relationship with medical debt and the probability of unmet mental health care needs, with higher medical debt associated with higher probability of foregoing care in US adults. These results suggest that financial assets may influence health care seeking behavior. Policy interventions to stem the rising tide of medical debt in the U.S. may aid in addressing unmet needs for mental health care.

# Mental health/function

State Policy Contexts, COVID-19 Response Policies, and Mental Health among U.S. Working-Age Adults Iliya Gutin\* Iliya Gutin, Shannon Monnat, Jennifer Karas Montez, Emily Wiemers, Douglas Wolf,

Multiple indicators of poor mental health, morbidity, and mortality reflect a deterioration in adult mental health over recent decades in the United States, a troubling trend which was exacerbated during the COVID-19 pandemic. Yet, like many health outcomes, national estimates can obscure important geographic heterogeneity. This study examines how adult mental health over a 30-year period was associated with major changes in states' policy contexts during that period, combined with states' policy responses to the COVID-19 pandemic starting in 2020. We use nationally representative data on adults ages 25-64 in the 1993-2022 annual waves of the Behavioral Risk Factors Surveillance System (N= 5,878,722), merged with time-varying measures of state policy context indices, measured on a liberal-to-conservative continuum, and COVID-19 policy indices, while accounting for key individual-level and state-level confounders. During the 1993-2022 period, each unit increase in state policy conservatism was associated with 0.3 more days of reported poor mental health in the past month and 8-10% higher probability of "extreme distress," defined as experiencing 30 days of poor mental health in the last month. States' COVID-19-related policies were associated with adults' mental health outcomes, net of the states' overall policy context index. Specifically, stronger restrictions on in-person interactions and (unexpectedly) more robust economic supports were associated with worse mental health. Overall, our results show that state policy contexts were a strong predictor of adult mental health and that those contexts continued to predict mental health during the pandemic, over and above states' pandemic policies. Our findings corroborate studies finding negative mental health externalities from limiting in-person interactions during the pandemic.

# Race/Ethnicity

# Double Colonization in Community-engaged Research: The Role of Mediators in Racialized Knowledge Production Lida Sarafrazarpatapeh\* Lida Sarafrazarpatapeh,

This paper examines the role of mediators in minority and indigenous community-engaged research, highlighting potential ethical challenges. Increasingly, minority mediators are recruited for clinical trials to bridge cultural and linguistic gaps, but their involvement may inadvertently reinforce power imbalances and ethical issues. Using two case studies from 1950s Iran, I explore how Kurdish and Arab minority communities were subjected to "double colonization"—oppression from both Western scientists and Iranian elites. While postcolonial feminist theory originally framed "double colonization" as patriarchal and colonial oppression faced by women in colonized nations, I apply it here to illustrate how minority communities face exploitation within scientific research.

Through the historical cases, I show how differences within minority groups can lead to unequal power dynamics and conflicts of interest, often overlooked in research policies and practices. This paper argues for a nuanced approach to minority representation in research, cautioning that mediators may prioritize their status over community needs, perpetuating colonial dynamics. Finally, I discuss the contemporary relevance of double colonization in participatory science and call for ethical frameworks that address complex intra-community dynamics in global health research.

## **Interventions/Programs**

Introducing the Michigan Veterans Cannabis (MiVetsCan) program: a community-based participatory research model to assess the effectiveness of cannabis products on chronic pain symptoms among Veterans Kevin Boehnke\* Kevin Boehnke, Vivian Kurtz, Laura Thomas, Catherine Klida, Jennifer Eckersley, Mia Railing, Tiffany Lopez, Riley Wegryn-Jones, Gabrielle Bowyer, Audrey Jackson, M. Arie Shaw, Maria Silveira, Avinash Hosanagar, Victoria Powell, Evangelos Litinas, Tristin Smith, Anne Arewasikpork, Poonam Purohit, John Scott, Daniel Kruger, Anna Kratz, Daniel Whibley, Kelley Kidwell, David Williams, Daniel Clauw, Amy Bohnert, Rachel Bergmans,

Chronic pain affects up to 30% of U.S. Veterans. Many Veterans seek and advocate for alternative treatments for pain management, including cannabis products. In 2018, the voters of the State of Michigan passed the Michigan Regulation and Taxation of Marihuana Act, which set aside funding to conduct clinical trials focused on understanding whether cannabis may help treat medical conditions present among Veterans and prevent Veteran suicide. Supported by these funds, the University of Michigan MIVetsCan program has engaged with Veterans throughout the research process. Veteran engagement has included eliciting advice on study designs before funding, using qualitative efforts to understand Veterans' perspectives and concerns about cannabis, and establishing a community advisory board of Veterans, clinicians, and researchers to develop Veteran-appropriate research materials and recruitment methods. This program consists of two clinical trials (n=468 each), supported by a newly developed registry of Veterans with chronic pain who are currently using or interested in using cannabis products for pain management. The first trial assesses whether oral cannabidiol (CBD) improves chronic pain symptoms compared with placebo. The second trial is a health coaching intervention informed by motivational interviewing principles and the cannabis literature that focuses on optimizing Veterans' use of medical cannabis products for pain symptoms. We previously completed a pilot (n=22) of the coaching intervention, which demonstrated statistically significant decreases in pain intensity and pain interference. Both of these virtually conducted trials are currently recruiting and are open to Veterans experiencing chronic pain who reside in any state with legal adult-use cannabis. These trials address key gaps in the cannabis and pain literature, and the registry will act as a platform for future research meant to improve Veteran health.

Culturally Tailored Telehealth Research: Insights from an Asian Indian Cultural Advisory Board Priyanka Gautom\* Priyanka Gautom, Cirila Estela Vasquez Guzman, Lisa Marriott, Cara Eckhardt, Shoba Ramanadhan, Gloria Coronado,

**Introduction:** Asian Indians are a diverse population with strong cultural and community ties. Despite being one of the largest immigrant groups in the U.S., they remain underrepresented in health studies, which is concerning given their high prevalence of various diseases. This highlights the need for improved access to preventative care and more inclusive research. Drawing on the structure of a community advisory board, this study formed a cultural advisory board (CuAB) to ensure the research was specifically tailored to the cultural values, practices, and traditions that are central to the Asian Indian community.

**Methods**: This community-engaged approach convened a CuAB of Asian Indian healthcare professionals from Washington State, each representing diverse cultural backgrounds within the community. The CuAB guided the design, recruitment, and materials of a subsequent study exploring the barriers and facilitators of telehealth use, ensuring cultural relevance was integrated at every stage.

**Results:** Five individuals participated in the CuAB. Their guidance led to the development of culturally and community-centered research processes and materials. Notably, the CuAB helped design the recruitment flyer and interview guide, highlighting opportunities to leverage culturally relevant language, symbols, and colors. The CuAB also identified community-based recruitment locations and non-traditional dissemination channels. Their contributions fostered participant engagement and community trust by making the research methods accessible and respectful of cultural norms.

**Conclusions**: This study underscores the importance of culturally tailored research through the active inclusion of community members. The CuAB's involvement ensured that the subsequent study was both relatable and relevant to the community, leading to more robust findings. This approach serves as a model for enhancing cultural competency and promoting meaningful community participation in research.

# Non-health institutions (business, political, education systems)

# Health Power Resources and Health Inequalities Megan Reynolds\* Megan Reynolds,

The rapidly-growing literature on 'structural determinants of health' underscores power constellations and imbalances as key factors in shaping the patterning of health across populations. Yet, to date, very little research has explicitly examined how such power relations affect health inequalities. Grounding the analysis in health power resources theory, I measure the proportion of Democrats, women, and racial minorities in US state legislatures in the years 1999-2019. Linking this state-year data to roughly 400,000 individuals each repeated cross-section of the Behavioral Risk Factor Surveillance System from the same time period, I use state random effects models to investigate how these proportions are associated with differential risk of major diseases among American low vs. high ed, women vs. men and racial minority vs. majority. The results of this study contribute to knowledge on population health by examining the distribution of power in a key American institution – government – and its potential role in the health inequalities across major axes of disadvantage.

LGBTQ+

Structural heteronormativity, sexual identity, and health among college students in a conservative state Ekaterina Baldina\* Ekaterina Baldina, Yunmyung Cho,

A growing proportion of young adults in the U.S. identify with a non-heterosexual sexual identity, such as lesbian, gay, or bisexual (Jones 2022). Alongside the increasing visibility of sexual minority identities and improving availability of data, there has been increasing efforts to understand the relationship between sexual identity and well-being (Blosnich et al. 2014; Strutz, Herring, and Halpern 2015). Specifically, much research shows that sexual minority adults fare worse regarding mental health outcomes, such as having increased risks for depression or anxiety (Plöderl and Tremblay 2015). Despite such advances, we know less about other dimensions of health that may (or may not) distinguish sexual minority adults from their heterosexual peers, such as health-related behaviors (e.g., eating breakfast, engaging in physical activity) or physical health outcomes (Hatzenbuehler et al. 2024). Furthermore, studies have rarely incorporated proximate local-level factors that may impact the health of sexual minority populations beyond the national or state level (Hatzenbuehler et al. 2024; Lattanner et al. 2024). Meanwhile, Indiana ranks low among U.S. states in terms of legal measures that promote LGBTQ+ individuals' well-being. For example, Indiana is one of nine states that have "Don't Say Gay" laws, restricting teachers from discussing LGBTQ issues; one of seven states that have HIV criminalization laws; and the only state with a law that prohibits local-level bans on "conversion therapy" for minors (Movement Advancement Project 2024). Such state-wide contextual factors may create a hostile environment for sexual minority young adults' health. This raises important questions about the state of sexual minority youths' health outcomes and whether more proximate contextual factors can have protective effects...

## **Structural factors**

A qualitative meta-synthesis of structural stigma toward mental health conditions and substance use Evan Eschliman\* Evan Eschliman, Long Jie Huang, Karen Choe, Jonathan Zhu, Ohemaa Poku,

The qualitative literature documenting lived experiences and perceptions of stigma's structural manifestations has rarely been characterized. This study aimed to synthesize the existing qualitative research on structural stigma toward mental health conditions and/or substance use. A systematic search of five databases (PubMed, PsycINFO, Embase, CINAHL, Web of Science) identified peerreviewed English-language articles using the term "structural stigma" published before January 1, 2025. Results from articles that reported qualitative research on structural stigma toward mental health conditions and/or substance use were organized using qualitative meta-synthesis methods into four conceptual domains from an established structural-level stigma mechanisms framework (legal, institutional, social, and physical/built environments). Thirty-nine articles were identified, with 19 on structural stigma toward mental health conditions, 17 on structural stigma toward substance use, and 3 on structural stigma toward both mental health conditions and substance use. Most of the studies were in the United States (n=13) or Canada (n=12). Participants and researchers in these studies identified structural-level stigma mechanisms across all four domains as well as strategies to navigate and resist structural stigma. The qualitative literature on structural stigma toward mental health conditions and/or substance use is robust and has identified key structural-level stigma mechanisms that can be further explored, measured, and intervened upon. Future qualitative research can further explore people's perceptions of laws and policies. Quantitative research measuring structural stigma can attend to the lived experiences and perceptions of structural stigma documented in qualitative research to date. Integrating the qualitative and quantitative literatures on these negative structural forces will best inform the development and implementation of structural-level stigma interventions.

# Historical Redlining and Binge Drinking in Early Midlife: The Mediating Role of Racial/Ethnic Disparities Morgan Scarzafava\* Muntasir Masum,

#### Introduction:

Historical neighborhood redlining, driven by racist lending policies and disinvestment, has been associated with ongoing socioeconomic and health inequalities. While research has linked these structural inequities to multiple adverse health behaviors, including binge drinking, few studies have examined how racial/ethnic disparities may mediate the relationship between redlined neighborhood characteristics and binge drinking, particularly in early midlife (ages 33–43). This project aimed to fill this gap by evaluating (1) the direct association between historical redlining and binge drinking, and (2) the mediating role of racial/ethnic disparities in this association.

# Methods:

This study used Wave V data (collected from 2016–2018) of the National Longitudinal Study of Adolescent to Adult Health (Add Health), focusing on participants aged 33–43. HOLC (Home Owners' Loan Corporation) redlining maps were used to classify respondents' childhood or adolescent residential locations into graded risk categories (A–D). We linked these data to participants' self-reported binge drinking frequency (≥5 drinks in a row for men or ≥4 drinks in a row for women within the past 30 days). Bivariate analyses assessed initial correlations between redlining status, binge drinking, and key covariates (e.g., demographic factors, socioeconomic status, smoking behaviors). Multivariable regression models (logistic and Poisson, as appropriate) were then used to evaluate whether living in historically redlined neighborhoods was associated with a higher probability/frequency of binge drinking in early midlife. Racial/ethnic disparities were examined as mediators using a causal mediation framework, adjusting for potential confounders such as sex, educational attainment, and personal/family history of substance use.

#### Results:

Out of the participants included in the final analytic sample (n  $\approx$  8,500), those who grew up in historically redlined neighborhoods exhibited a higher prevalence of binge drinking in early midlife (p < 0.001). After adjusting for demographic and socioeconomic factors, individuals from redlined areas had 1.35 times the odds of reporting binge drinking compared to those from non-redlined neighborhoods (95% CI: 1.18–1.55). Racial/ethnic disparities appeared to play a significant mediating role: Black and Hispanic individuals who grew up in redlined neighborhoods experienced a disproportionate burden of structural disadvantage, which partially explained their elevated odds of binge drinking relative to their white counterparts. Mediation analyses indicated that 28% (p < 0.01) of the association between redlining and binge drinking was explained by racial/ethnic disparities in socioeconomic resources, neighborhood investment, and social environment factors (e.g., alcohol outlet density, perceived neighborhood safety).

# Conclusion:

These findings suggest a robust association between historical neighborhood redlining and binge drinking in early midlife, shaped in part by racial/ethnic disparities in social and structural determinants of health. By highlighting the mediating role of racial/ethnic differences, this study underscores the need for targeted public health interventions that address the cumulative effects of structural racism and neighborhood disinvestment. Future longitudinal work should investigate the evolution of these disparities over the life course, and public health policies should focus on community-level revitalization efforts to reduce binge drinking and its sequelae in historically marginalized populations.

#### **Structural factors**

"Everybody I know went to the doctor at 10 S. Kedzie": Differential spatial racialization, medically underserved area designations, and the expansion of community health centers in Chicago, Post-ACA Natalie Bradford\* Natalie Bradford,

Initially a program to improve access to care in segregated Black communities, today community health centers (CHCs) are legally required to serve federally designated medically underserved areas and populations (MUA/Ps). The Affordable Care Act included provisions to modify MUA/P designation criteria, but they have not been updated since 1975 and do not account for the affect racial residential segregation has on health care access. This study used Public Health Critical Race Praxis to center marginalized voices, challenge dominant conceptualizations of MUA/P designations, and reveal the centrality of racialization in MUA/P policy decisions. Guided by a personal narrative, the study examined associations between MUA/P eligibility and designation among Chicago neighborhoods (N = 793 census tracts) between 2010 and 2019 and whether the associations varied by redlining. MUA/P data were obtained from the Health Resources and Services Administration and linked to demographic and housing data from the American Community Survey and Home Mortgage Disclosure Act. Multilevel logistic regression was used to examine associations and assess whether redlining moderated those associations. Results indicate that nearly half of Chicago census tracts were designated MUAs, but 158 were ineligible. Another 179 tracts were eligible but undesignated MUAs. All 192 redlined census tracts were on the city's West and South Sides. The West Side had the highest proportion of ineligible MUAs, and the South Side had the highest proportion of undesignated MUAs. Among redlined tracts, those that were ineligible for a MUA designation had higher odds of having a MUA designation than tracts that were eligible. This indicates a "MUA/P paradox" exists. Results also suggest redlined neighborhoods on Chicago's West and South Sides are racialized in different ways and that differential spatial racialization produces racialized geographic inequities in MUA/P designation and thus access to CHCs.

Do Food Environments Shape Children's Diet? Weak Evidence from a Poverty Reduction RCT Samantha Gailey\* Samantha Gailey, Tim A. Bruckner,

Poor diet remains a leading cause of chronic disease. In the US, low-income children adopt less healthy diets and suffer disproportionately from related cardiometabolic disorders. For example, obesity affects 1 in 4 low-income children, compared to 1 in 10 high-income children. A growing literature examines whether obesogenic food environments contribute to nutritional inequality, given evidence that low-income families are differentially concentrated into neighborhoods characterized by limited availability of healthy foods (i.e., food deserts). However, the role of food deserts in health inequities appears equivocal, owing in part to inconsistent measures and the predominance of cross-sectional designs. Here, we use a rigorous, randomized controlled trial (RCT) of poverty reduction among 1000 low-income families to test whether improvements in the food environment mediate the effect of unconditional cash transfers on children's diet. We first replicate prior work showing a protective effect of treatment—i.e., random assignment to the "high cash" group (in which mothers of newborns received \$333/month) vs. the control "low cash" group (\$20/month)—on children's diet at age 2. We then leverage inverse odds ratio weighting (IORW) to estimate natural direct and indirect effects using 3 popular food environment measures: (1) the Modified Retail Food Environment Index (tract level); (2) the number of food retailers accepting SNAP benefits (1-mile buffer around home); and (3) low-food-access areas designated by the Food Access Research Atlas (tract level). Results show null indirect effects for all 3 food environment measures. Taken together, improvements in the food environment (i.e., the combined mediating effect of all 3 measures) account for approximately 24% of the total effect of treatment on diet, but this combined indirect effect fails to reach statistical detection. Overall, we find weak evidence that improvements in the food environment, defined by 3 popular measures, mediate the effects of a poverty reduction trial on children's diet.

Transportation access and forgoing healthcare due to lack of transportation: Evidence from the Detroit Research on Cancer Survivors (ROCS) study Nora Akcasu\* Nora Akcasu, Jamaica Robinson, Julie Ruterbusch, Ann Schwartz, Theresa Hastert,

## **Background**

Transportation insecurity is an important determinant of cancer outcomes. This study evaluates associations between transportation access and forgoing care among cancer survivors.

#### **Methods**

Results included data from 3938 participants in the Detroit Research on Cancer Survivors cohort, a population-based study of Black cancer survivors. Transportation insecurity was measured by a dichotomous item asking if survivors had gone without healthcare due to a lack of transportation in the last year. Transportation access measures included self-reported car ownership and census tract public transit availability at study enrollment. We summarized associations of transportation access with transportation insecurity using unadjusted prevalence ratios (PR) and 95% confidence intervals (CI).

#### **Results**

10.1% of survivors reported forgoing healthcare due to a lack of transportation. A higher proportion of these survivors were unmarried, on Medicaid and had low incomes compared to transportation secure survivors. Overall, 63% of survivors reported owning a car. Prevalence of transportation insecurity was 5.5 times higher among survivors without compared to those with a car (CI:4.4-6.9). On average there were 22 public transit stops per square mile in survivors' census tracts; however, 38% of survivors lived in tracts with no public transit stops. Transportation insecurity was more common among survivors living in high transit stop density areas compared to those living in areas with no public transit, both overall and among survivors without a car (PRoverall:1.9, CI:1.5-2.4; PRnocar:1.4, CI:1.1-1.9).

# **Conclusions**

Forgoing healthcare due to lack of transportation varied by survivor characteristics. Car ownership reduced risk of transportation insecurity while living in high density public transit areas was associated with transportation insecurity regardless of car ownership. Further investigation is needed to understand contributors to transportation insecurity in cancer survivors.

An Approach to Building Community Impact: Best Practices for Co-Creating Community Health Data Reports Jennifer A. Wong\* Jennifer Wong, Charlie H. Nguyễn, Laura C. Wyatt, Victoria Foster, Stella Yi, Simona Kwon,

Background: NYU Langone and community-based organization (CBO) partners co-developed and administered a community health survey to identify cancer-related needs and assets in diverse, low-income, under-researched immigrant communities in the Perlmutter Cancer Center (PCC)'s New York City catchment area of lower Manhattan, Brooklyn, Queens, Nassau, and Suffolk counties.

Objectives: We present a community-based participatory research process to generate seven community-facing data findings reports led in partnership with the PCC's community advisory board and advisory network of CBOs and community leaders.

Methods: An iterative, community-engaged process included multiple rounds of discussion and consensus-building across a team of data analysts, programmatic staff, community health workers, and community partners to a) prioritize data to include in summary reports, and b) reach agreement on report format. Understanding community plans to utilize data and data findings (e.g., resource allocation, community outreach, program planning) guided report layout and design. We elicited input through regular facilitated meetings with CBO partners, open-ended discussions, data presentations, and group voting to reach consensus on community-preferred topics of interest, change solutions, dissemination modalities, and community-identified language needs.

Results: Community report design, content, and delivery represent a collective effort to present meaningful data report-back that may be used to guide actionable research, policy, and practice decisions and to inform community health programming and initiatives that address cancer health disparities in under-resourced communities.

Conclusions: Multi-level, multi-year engagement strategies help to sustain active bidirectional exchange and partner involvement in the community-academic research co-design process. Delivery of tangible support during regular touchpoints maintains trust between partners.

Community Insights on Organ and Tissue Donation to Improve Outreach in the West and South sides of Chicago Lizbeth Garcia\* Jennifer Holcomb, Anna Forte, Esperanza Garcia, Melinda Banks, Jackie Jacobs, Julie Flannery, Audrena Spence, Audrena Spence, Julie Flannery,

Black and Latine communities are the largest demographic groups on the organ donor waiting list yet comprise the smallest groups on the donation registry. It is crucial to increase organ and tissue donation registrations within these communities to promote health equity. Gift of Hope Organ and Tissue Donation Network, a nonprofit organ procurement organization, is working to reduce this gap by improving donation rates among the West and South sides of Chicago. The Gift of Hope Community Foundation (Community Foundation) partnered with Sinai Urban Health Institute (SUHI) to develop a qualitative longitudinal evaluation to explore attitudes, beliefs, and norms impacting organ and tissue donation and create communication materials.

SUHI conducted two rounds of focus groups in English or Spanish with community leaders. During the first round, knowledge about the donation process, and motivators and barriers to registration were assessed. The Community Foundation used this information to draft key messaging materials. In the second round, participants provided feedback on the overall messaging and community relevance. The focus groups analyzed using rapid qualitative analysis.

A total of 28 participants attended at least one focus group. Participants' ages ranged from 22 to 72 years. Most identified as female (85%), Hispanic/Latine (68%), and Black/African American (32%). Findings emphasized the role of stigma, fear, and lack of trust in the medical system as barriers to organ and tissue donation, while the impact of testimonies from organ recipients and donors emerged as a key motivator. Participants provided suggestions to improve culturally appropriate messages. Participants recommended tailoring outreach to focus on donation education rather than registration This project underscores the value of integrating community voices into developing public health strategies, leading to more culturally responsive and effective education and outreach strategies.

Access to Healthcare among Muslims in Southeast Michigan: A Systems Approach Sajeela Munir\* Erum Ikramullah, Ayaz Hyder, Zaynab Qatu, Mohammad Muntakim,

This research aims to address the experiences of Muslims in Southeast Michigan facing barriers to accessing healthcare by providing research-based tools and recommendations grounded in local context, expertise, and experiences. A 2022 survey by the Institute for Social Policy and Understanding (ISPU) showed that a majority (62%) of Muslims in America have experienced religious-based discrimination in the past year.

Community-based system dynamics (CBSD) is an approach to understanding broad, complex problems. We used CBSD in this study to address the problem of access to healthcare among minority populations in SE Michigan. The problem of access to healthcare is multi-faceted given how many different dimensions there are to this issue, such as affordability, insurance status, availability of transportation, and prior experiences with healthcare providers. This methodology is community-based in that researchers engage with participants through facilitated workshops to identify the problem, identify the interconnected parts of the system impacting the problem, and identify solutions. This ensures that insights from the research are grounded in the local context, expertise, and experience. The workshop activities led to several key visual diagrams illustrating community input into how different parts of the system interact to influence access to healthcare.

The report also includes six recommendations and a set of policy options based on the information obtained and analyzed from the workshop activities and community interviews. These recommendations and policy options, which are grounded in the experience of the local community, offer a blueprint for interested and motivated individuals and non-profit, community-based, and governmental organizations to collaboratively work toward closing the gaps and addressing inequities in the health, healthcare, and well-being of American Muslims and other communities in Southeast Michigan.

This research empowers communities in the United States with an innovative playbook on how to bring together multiple stakeholders from multiple sectors to solve a complex community challenge (e.g., Islamophobia, access to health care, Islamic education, and community resiliency) using a systems approach. Systems are the sum of their parts and when no one sector or organization can solve or address a complex community challenge then systems-level innovations provide a way forward as long as there is the capacity and resources to do so.

Creating an endometrial cancer educational toolkit for the community by the community Minerva Orellana\* Minerva Orellana, Patrice Williams, Julianna Alson, Adrienne Moore, Margie Wilson, Ziiomi Law, Zoe Julian, Kemi Doll,

Endometrial cancer (EC) has a high mortality disparity, with Black women dying at twice the rate of white women. This is driven, in part, by a higher likelihood of advanced stage diagnosis among Black patients. Recent evidence supports a change to clinical guidelines to prioritize biopsy – rather than ultrasound – as a more effective test to increase early detection of EC among at-risk Black individuals presenting with the cardinal symptom of EC – postmenopausal or abnormal bleeding. To ensure awareness and equitable healthcare utilization in this emerging context, we sought to develop an educational toolkit to support Black patients with uteruses to make an informed decision about their EC diagnosis.

Our community-engaged project aims to develop an educational toolkit accessible to any Black patients with a uterus. The toolkit incorporated results from our community-engaged mixed-method project for information dissemination. At every level of the toolkit creation and dissemination, we engaged our community consultants, EC survivors and Black advocates for gender diverse identities. We posted toolkit content on social media platforms with metrics tracking to determine reach and engagement.

We have two content material versions for the inclusiveness of everyone with a uterus. Based on focus group results, we developed a toolkit that took a "risk-based" approach by sharing information to empower recipients to assess their best course of care. The toolkit includes infographics and reels. The information ranges from endometrial cancer background and risk, information about gynecologic procedures, to how to engage with a provider. Early metric analysis shows more engagement on our general gynecologic content than on our endometrial cancer-specific content.

Engaging with community partners and stakeholders from an early stage has provided us with the opportunity to disseminate relevant and necessary information to this community at high risk for endometrial cancer.

Breaking Barriers: Transforming Maternal Health Services Through Community Engagement and Care Coordination Jazmin Cascante\* Jenny Bernard, Jenny Bernard, Victor Carillo, Jose Azar,

**Research question:** In low-income postpartum patients disproportionately affected by social determinants of health, how does a community-engaged, nurse-led transition of care model, compared to standard postpartum care, affect hospital readmission rates within 30 days post-discharge?

**Significance:** Maternal health (MH) inequities, primarily driven by social determinants of health (SDoH), significantly contribute to adverse patient outcomes, including the rise in maternal mortality from 20.1 in 2019 to 32.9 in 2021. The First Thirty (FT) program emphasizes the vital role of community partnership in addressing health inequities by enabling patient-centered care, improving MH outcomes, and reducing readmissions. The FT program tackles health disparities by empowering interprofessional healthcare teams to provide comprehensive care, fostering better postpartum outcomes.

**Data/methods:** A diverse multidisciplinary team implemented innovative care coordination through the FT initiative by implementing the Transition of Care Bundle (TOCB), consisting of care coordination, transportation, medication, follow-up phone calls, and a patient-centered wellness package. This initiative partnered with community-based organizations to address SDoH needs via referrals, health fairs, and educational workshops for underserved communities.

**Results:** The findings reveal a remarkable decline in the overall readmission rate since the program's launch, dropping from 7% in 2022 to 2% in 2023 and 1.6% in 2024. Strong community partnerships resulted in a 100% appointment scheduling rate and a 73% attendance rate. This involved 15,140 reminder calls and 1,321 transportation services provided. During the 2023 cohort year, 77% of the patients screened for eligibility were enrolled and received TOCB services. These results strongly reinforce the program's effectiveness in advancing MH outcomes.

Integrating Food Insecurity Interventions into Primary Care: Evaluating the Feasibility and Acceptability of Integrating an Online Food Delivery Service for Diabetes Management Yvette Castañeda\* Yvette Castañeda, Jessica Yunez, Kristin Schneider, Melissa Chen, Amanda Simanek,

There is a growing effort to address social needs within healthcare delivery via collaborations with community-based organizations instead of only via referral to services. This pilot study explores the potential for integrating enrollment of patients into a free online food delivery service (Post Pantry) operated by a community partner, Adelante Center, within healthcare visits at the Interprofessional Community Clinic (ICC), a student-led free primary care clinic at Rosalind Franklin University to improve diabetes care management among patients experiencing food insecurity.

The study objectives are to assess the (1) acceptability of Post Pantry among food-insecure patients with diabetes and (2) feasibility of integrating enrollment into this service into ICC patient visits among ICC and Adelante Center staff. We are conducting focus groups with ICC patients ( $\sim$ N= 22) aimed at identifying their experiences with food insecurity screening, challenges with accessing healthy food and food preparation, and acceptability of using Post Pantry. Interviews with ICC ( $\sim$ N=10) and Adelante Center (N=3) staff are assessing the current food insecurity screening processes, feasibility of integrating enrollment in the food delivery service into clinic and Adelante Center workflow, and Post Pantry functionality for augmenting patient behavioral nutritional counseling.

We will utilize Nvivo to identify themes from the focus group and key informant interviews, and patterns across patient demographic characteristics and ICC and Adelante Center staff roles will be examined. A community advisory board for the project will aid interpretation of our findings and assist us with development of an intervention protocol for implementation.

Insights gained from this pilot study will not only inform implementation of a food delivery intervention within the ICC but also a plan for assessment of its impact on improving diabetes-related health outcomes among patients experiencing food insecurity over time.

Lessons from Co-Developing a Culturally- and Linguistically-Tailored Health Information Campaign for Asian American Communities in New York City Jennifer A. Wong\* Jennifer Wong, Lan N. Đoàn, Simona Kwon, Anita Gundanna, Vanessa Leung, Lily Shen, Nhien Le, Stella Yi,

## Background

Language access and culturally tailored health information are critical components of timely and effective public health communication. At the start of the COVID-19 pandemic, a lack of in-language health information disseminated through community-preferred channels – such as religious institutions and local organizations – exacerbated existing linguistic, cultural, and economic challenges across communities of color, including among the rapidly growing and diverse Asian American population, thereby increasing infection risks and outcomes.

#### Methods

The NYU Center for the Study of Asian American Health collaborated closely with the Coalition for Asian American Children and Families and a network of community-based organizations (CBOs) to co-create a culturally and linguistically relevant health information campaign aimed at encouraging vaccine acceptance and increasing access to immunization services for limited English-speaking Asian Americans in New York City. CBO partners played a central role in informing resource development including drafting content, materials design, community review, pilot testing, and dissemination, to directly respond to local community needs.

# Results

The campaign produced plain-language materials transcreated into 11 Asian languages, including a frequently-asked-questions infographic, glossary terms palm-card, and 15- and 30-second public-service-announcement videos. Materials were disseminated through the CBO network and via virtual and print ethnic media channels and platforms, reaching 1.6m views and 2m impressions across a 4-week period.

#### Conclusions

Utilizing participatory, community-centered approaches to develop content and leveraging existing trusted social networks ensures that messages are responsive to community concerns. This successful model may be applied to future public health emergencies to ensure communities receive needed information, prevention messaging, and interventions in real-time to improve health outcomes.

## **Interventions/Programs**

Advancing equity in lupus chronic pain through a yoga-based coaching intervention: A community-engaged feasibility study Rachel Bergmans\* Rachel Bergmans, J. Michelle Kahlenberg, Dominique Kinnett-Hopkins,

Chronic pain disproportionately affects Black women with systemic lupus erythematosus (SLE), representing a critical need for equitable solutions. Despite effective treatment of SLE disease activity, many individuals have debilitating chronic pain that is inadequately treated with steroids and opioid medications, which carry significant risks with long-term use. Integrative treatment modalities, like yoga, can alleviate chronic pain in other chronic inflammatory conditions, but evidence supporting their consideration for SLE chronic pain remains elusive. To address this gap, we developed a multicomponent, person-centered, and yoga-based coaching program for SLE chronic pain, called MiPAL, that draws from motivational interviewing principles and social cognitive theory. Instead of assigning a regimented yoga practice, MiPAL is tailored based individual preferences and limitations with the support of a health coach who encourages participants to take ownership of their goals for behavior change. As an interdisciplinary team of researchers, clinicians, and people who have lived experience with SLE, we are focused on the need for safer, more effective, and more equitable SLE pain management. When designing MiPAL, we prioritized Black perspectives to overcome inequities in SLE care and research conduct. This study aims to 1) determine MiPAL's feasibility using a pragmatic trial (n=15) and 2) increase MiPAL's acceptability and accessibility among Black women through a community-engaged approach that includes focus groups and qualitative interviews. Our findings will inform the broader field of pain science on the value of community-engaged and person-centered interventions for advancing equity in pain care. We expect preliminary data for dissemination by September 2025.

0990 P1

**Aging** 

# The Impact of Early Disability Onset on Depression Among Older Adults: The Mediating Role of Social Isolation Jaein Kim\* Jaein Kim,

Depression is a major public health concern among older adults, often exacerbated by functional limitations in Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). While previous research has established the link between physical disability and depression, the timing of disability onset and its role in shaping mental health outcomes remain underexplored. This study investigates the association between early disability onset and depression, with a specific focus on the mediating role of social isolation. Using nationally representative data from the 2010-2020 waves of the Health and Retirement Study (HRS), this study employs multilevel modeling to assess the effects of disability onset on depressive symptoms while accounting for social isolation. The findings indicate that individuals who experience disability onset before age 75 report significantly higher levels of social isolation compared to those with later-onset disabilities or no disability. Furthermore, early disability onset is associated with increased odds of depression. When social isolation is incorporated into the models, it partially mediates the relationship between early disability onset and depression, suggesting that social disconnection plays a crucial role in the mental health trajectories of disabled older adults. These results underscore the importance of addressing social isolation as a key intervention target to mitigate depression in this population. Future research will explore potential gender disparities in this process, given prior findings that women with disabilities are at greater risk of depression due to lower levels of instrumental support from partners. This study contributes to a growing body of literature that reframes depression among older adults not only as an individual psychological issue but as a socially driven phenomenon, necessitating policy and community-based efforts to enhance social connectivity among those experiencing early-onset disabilities.

**Aging** 

Resilience of Non-Corporate Assisted Living Facilities During the COVID-19 Pandemic Nia Washington\* Nia Washington, Lindsey Smith, Kali Thomas, Momotazur Rahman, Eric Jutkowitz, Cassandra L. Hua, Sean Huang,

#### **BACKGROUND:**

The COVID-19 pandemic has had a profound impact on the healthcare sector, particularly on assisted living (AL) communities, which provide residential care and assistance with activities of daily living to older adults. Previous research has documented the shift towards more corporate chain operated ALs following the financial stressors COVID-19 posed. While much research has focused on facility closures and their effects on communities, there is a gap in understanding the characteristics of nonchain, independent ALs that demonstrated resilience by remaining operational throughout the pandemic. This study aims to identify the community-level factors associated with the resilience of standalone ALs during the COVID-19 pandemic.

## **RESEARCH QUESTION:**

What community-level socioeconomic and demographic factors are associated with the resilience of non-chain assisted living facilities during the COVID-19 pandemic?

#### **METHODS:**

This study utilizes data from the 2019 American Community Survey (ACS) with a national directory list of assisted living facilities (ALs) that were operational from 2019-2023, and a novel database created by our team describing chain membership, as determined using business listings and corporate hierarchies. We excluded corporate chain operated ALs and those not operational over the entire study period. Descriptive statistics are used to characterize the communities where the ALs are located, including socioeconomic and demographic variables such as median household income, poverty rates, population density, and the proportion of the population age 65 and older by capacity to identify any size-related trends in resilience. ACS and AL datasets are joined by location. COVID-19 incidence rates at the county level, obtained from the CDC, are included to control for local pandemic severity. Statistical tests, such as t-tests and chi-square tests, are used to compare community characteristics of resilient ALs with those that closed during the pandemic. Regression analysis is conducted to assess the relationship between community factors and AL resilience, controlling for regional differences and local COVID-19 incidence rates.

# **Preliminary Results:**

We identified 616 large non-chain ALs (25+ capacity) and 14,389 small non-chain (25> capacity) ALs. Among non-chain ALs, those that remained operational during the pandemic were located in communities with significantly higher median household incomes (M = 68,420, SD = 20,350) compared to those that closed (M = 54,110, SD = 19,780; p < 0.001). Preliminary results indicate that resilient ALs, those that remained operational throughout the pandemic, were more likely to be located in communities with higher median incomes (p < 0.001), lower poverty rates (p < 0.01), and higher population densities (p < 0.05), compared to non-chain ALs that closed during the study period. Regression analysis revealed that higher median income and lower poverty rates were significantly associated with AL resilience (p < 0.05), even after controlling for regional differences and local COVID-19 incidence rates. Additionally, ALs in urban areas were more likely to remain operational compared to those in rural areas (p < 0.01).

**Aging** 

# Rural residence and dementia prevalence over time and across sociodemographic subpopulations in the United States Bhumi Shah\* Meghan Zacher, Susan Short,

Among older adults in the United States, residents of rural areas are disproportionately affected by dementia, a syndrome marked by declining cognitive function and memory that is poised to become one of the most significant population health challenges of the century. However, few studies have examined whether and how rural disadvantage in dementia prevalence varies over time. Furthermore, little is known about which rural subpopulations are most affected, or for whom ruralurban disparities in the prevalence of dementia are largest and smallest. Understanding how the prevalence of dementia varies across places, over time, and across subpopulations is necessary for anticipating and planning for the challenges associated with dementia. Such efforts are particularly important in rural communities, where access to quality healthcare and other services for people with dementia and their loved ones is often severely limited. The current study will address these gaps in knowledge by estimating dementia prevalence among rural and urban Americans over the period 2000 to 2020 and across sociodemographic subpopulations, including by gender, ethnoracial identification, and level of education. Data will be from those ages 65 and older in the Health and Retirement Study, a nationally representative longitudinal survey of older U.S. adults. Analyses will consider multiple measures of rurality and will account for changes in the classification of rural areas. Analyses will also examine the extent to which patterns are explained by trends or disparities in social and economic circumstances, health profiles, and local contextual factors.

**Bioethics** 

Patient Perspectives on the Use of State Cancer Registries for Population Health Research Regan Manning\* Lynette Hammond Gerido, Winston John-Mark,

## **Background:**

Population health research increasingly relies on big data repositories and artificial intelligence (AI) to study complex issues. State cancer registries remain a valuable resource in the data ecosystem, offering critical incidence and demographic information that can be integrated with AI algorithms to advance disease surveillance, precision medicine, and culturally tailored interventions. However, while such registries are foundational for data-driven solutions, ethical frameworks and patient perspectives about consent, privacy, and transparency remain underexplored. The purpose of this study is to 1.) assess cancer patient awareness of state cancer registries, 2.) explore patient perspectives on use of state registry data for research, (3) identify state-specific policies governing data usage, and 4.) identify gaps between patient perspectives with policies and research practices.

#### **Methods:**

This is a two-stage qualitative study consisting of a systematic review followed by qualitative interviews. First, we conducted a systematic review of peer-reviewed articles published in Pubmed and Embase from January 2013 to May 2024. Development of the search terms aimed to isolate articles which focused on the analysis of a registry's function and data practices related to research, rather than those which utilized a registry for an epidemiological study. Search terms were constructed around three main themes: state policies, data sharing and ethics. A combination of search terms with common Boolean operators were used and combined with MeSH terms and appropriate permutations for each database. Search findings were imported into the reference management software (Zotero Version 6.0) then uploaded into Covidence where two reviewers independently screened the titles and abstracts (13097 articles). A third reviewer resolved conflicts and moderated consensus discussions. The full-text review of the 102 screened articles is anticipated to be completed in April 2025 when we will extract the final corpus for content analysis. Second, in May 2025 we will interview adult cancer survivors whose records would be mandatorily stored in the state cancer registry. The interview transcripts will be thematically analyzed to capture awareness levels, perspectives about cancer surveillance, use of registry data for research, and opportunities for patient-centered engagement in policy implementation and research design.

# **Results:**

Preliminary findings indicate that many participants are unaware of state cancer registries and mandatory reporting requirements. Participants express a need for transparent data management and responsible use of emerging analytics tools. Through this study, we expect to highlight the diverse ways state registries are utilized in population genomics, illuminate barriers (e.g., data completeness, inconsistent consent protocols, governance restrictions), and uncover opportunities for improving collaboration between researchers, registries, and patients.

## **Conclusion:**

Integrating the priorities expressed by cancer patients in the research practices of state cancer registries can foster trust and ensure that advanced analytics, such as those used in genomics and pharmacogenomics, align with patient values. Lessons learned from state cancer registries can guide broader cross-disciplinary efforts to harness these large population data repositories for population health research.

# Biomarkers or biological pathways

Is Police Violence Associated with Cortisol and Inflammatory Markers in Black Women? An Exploratory Analysis Latesha Harris\* Latesha K. Harris, Yamnia Cortes, Sirry Alang, Michelle Meyer, Todd Schwartz, Taleah Frazier,

**Background:** Black women's exposure to police violence is a racism-related stressor that may be associated with systemic inflammation, which can contribute to the development and progression of cardiometabolic disease. Yet, to date, no studies have examined the association between police violence exposure and cardiometabolic risk among young Black women. This study aimed to explore the relation of police violence to cortisol levels and inflammatory markers in Black women. We additionally explored the interaction between police violence and inflammatory markers in relation to their combined effect on cardiometabolic risk (CMR).

**Methods:** This cross-sectional study investigated the association between exposure to police violence and cortisol levels and inflammatory markers (hs-CRP, IL-6, IL-4, IL-10, IL-13) among 59 Black women aged 18-40 years in North Carolina. We assessed direct and vicarious exposure to police violence using ten dichotomized items from the Police Practice Inventory. We conducted separate bivariate and multivariate linear regression analyses to determine associations between each police violence item and cortisol and inflammatory markers. Additionally, we conducted exploratory analyses of the interaction of inflammation between police violence and a cumulative measure of CMR.

**Results:** This exploratory study found that women who report exposure to psychological police violence may have lower cortisol and anti-inflammatory markers than women who do not experience psychological police violence. No significant interactions were observed between pro- and anti-inflammatory markers and any of the police violence exposures on CMR.

**Conclusions:** Inflammation is a key contributor to cardiometabolic disease. Our results add to a growing body of literature on the physiological impact of stress. Future longitudinal studies with a larger sample size are necessary to validate any potential hypotheses generated from this study.

# Biomarkers or biological pathways

Early Midlife Population Trends in Stress and Cardiovascular-Kidney-Metabolic Syndrome Athena Owirodu\* Athena Owirodu,

Cardiovascular disease is often accompanied by the onset of kidney and metabolic illnesses (Ndumele et al. 2023; Aggarwal et al. 2024) The increasing coexistence of these illnesses as comorbidities is illustrated among the U.S. population health trends, with 25% of the population experiencing a condition in either one of the three domains (Aggarwal et al. 2024). In 2023, Cardiovascular-Kidney-Metabolic (CKM) syndrome was presented by the American Heart Association as a new disease construct rapidly progressing among the U.S. population. Furthermore, an unequal burden exists in CKM syndrome prevalence. People at high risk for developing CKM syndrome are individuals who are non-Hispanic Black or Asian, of low socioeconomic status, and/or have no high school degree (Aggarwal et al. 2024; Li et al. 2024). Stress, specifically chronic and perceived stress, may help explain the prevalent disparity in CKM syndrome population health. Stress can be defined as "perception of environmental demands surpassing the capacity of an individual to adapt to a given situation" (Vaccarino & Bremner 2024). This project focuses on understanding the association between stress and CKM outcomes to capture the implications of stressful life course events on CKM development. Using a mid-life sample aged 33-43 from Add Health (Wave V; N=5,381), preliminary research reveals that about less than five percent of respondents with valid biomarker measures fall under the most advanced stage of CKM syndrome (stage 4), best characterized as experiencing a cardiovascular event. Further analysis will involve (1) documenting prevalence rates within the Add Health sample, (2) establishing the focal relationship between different dimensions of stress and CKM syndrome, and (3) analyzing differences that persist once CKM syndrome patterns are stratified by race.

## Chronic disease

An exploration of the relationships of physical activity, exercise and sedentary behavior in Systemic Lupus Erythematosus: A Qualitative Study Alaa Alawamleh\* Alaa Alawamleh, Deena Aboul-Hassan, Nikhita Mahajan, Brooke Bailey, Johari Summerville, Moriah Ma, Kennedy Ellis, Rachel S. Bergmans, Dominique Kinnett-Hopkins,

**Background:** Physical activity (PA) and exercise are modifiable lifestyle behaviors that can help manage symptoms of Systemic Lupus Erythematosus (SLE). However, a low proportion of SLE patients meet recommended PA guidelines. The barriers to achieving PA guidelines are complex and include the impacts of SLE on exercise and sedentary behavior. Thus, we aimed to explore the relationships among PA, exercise, and sedentary behavior among individuals living with SLE.

**Methods:** We used a qualitative, interpretive description approach involving semi-structured interviews with adults with SLE. Our interview guide was tailored based on feedback from diverse key informants from the study population. Interviews explored participants' experiences and understanding of physical activity, exercise, and sedentary behaviors. We conducted an inductive thematic analysis on de-identified transcripts. Theme development focused on understanding how people with SLE engage in these behaviors and opinions of the role of these behaviors in managing lupus.

**Results:** This study included 31 interviews with participants (100% female, age range = 24 - 65 years). Our analysis identified three key themes: 1) Pain, fatigue, and lupus flares contribute to frustration and inactivity. 2) Insufficient guidance on PA causes uncertainty about appropriate engagement, and 3) Fear of exacerbating symptoms and feelings of guilt over inactivity hinder consistent participation.

**Conclusion:** Participants with SLE face significant barriers to engaging in physical activity, including symptom-related limitations, and lack of provider guidance. Our results underscore the necessity for consistent support and education on safely engaging in PA and exercise for persons living with SLE.

Chronic disease

Developing a Predictive Model for Cardiovascular Disease with Only Social and Behavioral Risk Factors Stephanie Kjelstrom\* Stephanie Kjelstrom, Richard Hass, Brandon George, Sharon Larson.

**Background:** Cardiovascular disease (CVD) is the leading cause of mortality in the US. Current CVD risk scores that physicians use contain behavioral and clinical risk factors (smoking status, blood pressure, lipids, diabetes etc.). However, many studies have identified CVD social, environmental, and behavioral risk factors (SEBRFs) which are precursors to clinical factors and often missing from patient charts. Creating a predictive model with only SEBRFs may offer earlier risk stratification than traditional CVD risk scores, and could be administered in both community and healthcare settings.

**Objective:** To develop a predictive model for CVD using solely SEBRFs.

**Methods:** We analyzed the 2021 Medical Expenditure Panel Survey, utilizing the social determinants of health questionnaire data (18,435 participants). Multivariable logistic regression regularization methods LASSO, elastic net, and forward selection with BIC were employed for model development. Fifty-two variables were included in the models. Performance was assessed with an area under the curve (AUC), observed vs expected (O:E) ratio, and k-fold cross-validation (CV) with 10 folds.

**Results:** LASSO with cross-validation achieved the highest AUC via k-fold CV (82.7% [81.3, 83.2]) and excellent O:E (1.003), closely followed by elastic net (82.3% [81.6, 83.4]) and forward selection with BIC (82.5% [81.3, 83.1]). Significant predictors included age, sex, Medicaid status, mental health diagnoses, current stress, adverse childhood events, smoking, exercise, transportation issues, mold exposure, income, household size, debt collection contact, education, discrimination, and marital status.

**Conclusion:** SEBRFs alone can yield highly predictive CVD models. A risk score based on these upstream factors could enable earlier patient risk stratification before clinical manifestations, facilitating preventative interventions.

Chronic disease

Readability of Online Information on Cardiometabolic Diseases: Implications of Health Literacy Jaydon Michalczyk\* Osayande Agbonlahor, McKing Amedari, Haley James,

**Significance:** Low health literacy has been shown to be associated with adverse health outcomes including cardiometabolic diseases (CMD). The internet is increasingly popular for accessing health information, however, limited data on the readability of online information on CMD exists. Therefore, this study aimed to evaluate the readability of online information on CMD.

**Methods:** We conducted a search of webpages using the following search terms: "hypertension," "heart attack," "stroke," "diabetes," "obesity," "chronic kidney disease," "nonalcoholic fatty liver disease," and "metabolic syndrome". The first 20 webpages for each search term were recorded and coded for CMD outcome (i.e., hypertension, myocardial infarction, stroke, diabetes, obesity, chronic kidney disease, non-alcoholic fatty liver disease, or metabolic syndrome), and webpage source type (i.e., governmental organizations, advocacy/non-governmental, educational/scientific, digital media, or academic journals) by two coders. The readability level of the 205 webpages identified was evaluated using the Flesch-Kincaid Grade Level measure. ANOVA was used to compare the mean readability scores by webpage source type and CMD outcome.

**Results:** On average, the readability level of online webpages identified was at an 8th grade reading level (Flesch-Kincaid Grade Level M = 8.45, SD = 2.56), and only 28.7% of webpages met the American Medical Association's readability guidelines (i.e., < 6th grade reading level). Differences in readability by source (p=<0.001) and CMD outcomes (p=<0.001) were found, with online CMD information by digital media having higher readability scores than governmental organizations (M=8.41 vs 7.65) and readability of information on hypertension harder to read than obesity (M=10.49 vs 7.40).

**Conclusions:** Majority of online information on CMD is not written at a grade level that can be easily read and comprehended by the public. Digital media, educational and health care organizations should evaluate the readability of their online information to ensure it is accessible to everyone and can aid informed decisions.

## **Environmental factors**

THRIVEair Philly: Results from a Community-Based Participatory Air Monitoring Study Lisa Frueh\* Lisa Frueh, Sheila Tripathy, Karlin Moore, Grace Tiegs, KC Wahl, Leah Johnston,

Low-income, majority-Black neighborhoods in South/Southwest Philadelphia face disproportionate air pollution from clustered sources (industrial facilities, ports, interstate highways, international airport). The community is specifically concerned about fugitive emissions of benzene and other volatile organic compounds (VOCs) from a decommissioning oil refinery which closed after a major explosion in 2019. We partnered with Philly Thrive, a local environmental justice organization, to codesign a one-year air monitoring study using Community-Based Participatory Research (CBPR) methods.

Following a co-design process, we selected nine sites surrounding the former refinery for weekly monitoring, and 11 sites of community concern (e.g., parks, schools) monitored for four weeks over the study period (June '23 – June '24). Results were communicated to the community through fact sheets and events. Here, we describe results from source apportionment analyses of VOCs.

Concentrations for all monitored VOCs were generally low throughout the year. We used Principal Component Analysis (PCA) to identify potential sources, after accounting for temporal autocorrelation and unbalanced observations per site. Results suggest three components: (1) urban mix of benzene derivatives and shorter chain (C6-C9) alkanes (which explained 67% of variance in our data); (2) longer-chain (C10-C12) alkanes, suggesting diesel emissions, at sites near highways; (3) chlorinated compounds (tetrachloroethylene, trifluoromonofluoromethane), higher near the waste transfer station, suggesting industrial solvents or emissions from this site.

Through our CBPR process, we identified benzene and its derivatives as key pollutants of concern to the community. VOC concentrations were generally low, including benzene. However, PCA results suggest key sources of VOCs in the community besides the former refinery site (i.e., waste transfer site, highways).

## **Environmental factors**

Ripple Effects: Association between Race/Ethnic Composition, Water Contaminants, and Chronic Disease Prevalence Across Census Tracts in Lake County, IL Amanda Simanek\* Amanda Simanek, Ali Panahikarvand, Namhee Kim,

Areas of race/ethnic spatial segregation are often characterized by greater levels of environmental hazards which may increase risk for chronic disease among racially minoritized groups. Understanding of the role of water contaminants in explaining race/ethnic inequities in health at the area-level remains, however, limited. This study examined associations between race/ethnic composition, levels of 13 water contaminants, and prevalence of 21 chronic health outcomes at the census tract-level in Lake County, IL. Data on race/ethnic composition (% non-Hispanic White (NHW)) and other covariates (% 65 and older and median household income) were from the U.S. census. Levels of 13 contaminants from Illinois Environmental Protection Agency water distribution system testing (2020-2021) were geocoded and averaged in each tract with available data. Prevalence of 21 health outcomes at the census-tract level were from CDC PLACES (2021). Spatial regression models were used to examine associations between %NHW, contaminant levels, and prevalence of health outcomes at the census tract-level, with false discovery rate (FDR) adjustment based on the Benjamini-Hochberg method. There were positive associations between %NHW and prevalence of cervical cancer, arthritis, any cancer, and depression, but inverse associations with diabetes, kidney disease, teeth loss, vision problems, cognitive disability, overall disability, and poor overall health as well as copper at the census tract-level, but not with any contaminants after FDR adjustment. Trichloroacetic acid, total trihalomethanes, and chloroform levels were also associated with prevalence of several health outcomes at the census tract level. While findings suggest contaminant levels measured in this study do not explain race/ethnic inequities in prevalence of chronic disease observed at the census tract level, further monitoring of water quality and assessment of the effect of contaminants on health in Lake County, IL is warranted.

Gender

Gender Inequality and Women's Health and Well-Being in Developing Countries: The Moderating Role of Socioeconomic Status Samia Sultana\* Samia Sultana, Thomas E. Fuller-Rowell,

An established literature suggests an inverse association between gender inequality in the labor market and women's health and well-being such that women's health tends to be poorer in countries with greater gender disparities. However, few if any studies has examined whether gender inequality at the country-level is more strongly associated with health among less advantaged SES groups. To address this gap, we examined the interactive effects of gender inequality in labor force participation and household income on women's health and well-being in developing countries. Data from the World Values Survey (2017-2022) included 33,822 women from 45 developing countries and were merged with labor force participation data to assess the impact of gender inequality on women's self-assessed health and life satisfaction across income groups. Results showed that when all income groups were considered together, gender inequality was a significant predictor of women's life satisfaction (B = -0.15, 95% CI [-0.26, -0.03], p = .013), but not self-reported health. The interaction between gender inequality and household income was significant or marginally significant, such that women from low-income households in countries with high labor force inequality reported significantly lower odds of good health (OR = 0.89, 95% CI [0.82, 0.97], p = .012) and lower life satisfaction (B = -0.23, 95% CI [-0.47, 0.01], p = .054) compared to their counterparts in countries with low labor force inequality. This pattern was similar for middle-income households, while women from high-income households were relatively unaffected by labor force inequality. The results extend previous research by showing that the association between gender inequality and women's health may be largely driven by less advantaged socioeconomic groups, and highlight the need to consider mechanisms linking gender inequality to health among women in lowincome households.

## **Health behaviors**

Investigating Health Lifestyles Trajectories from Young Adulthood through Early Midlife Carlyn Graham\* Carlyn Graham, Michelle Frisco, Calvin Pyatt,

Health lifestyles, or clusters of health-related behaviors that are generally organized around social class lines, have impacts on physical and mental health, and longevity. Research has categorized health lifestyles at different life course stages, but less is known about health lifestyles trajectories, especially across young adulthood and into midlife. This is notable because variability exists for different health-related behaviors as young adults age into midlife. Furthermore, this variability is likely to be patterned by social characteristics, meaning that health lifestyles trajectories have important implications for health disparities. Our study uses data from the National Longitudinal Study of Adolescent to Adult Health and Group-Based Trajectory Modeling (GBTM) to determine how health lifestyles change from young adulthood to early midlife. We define health lifestyles by frequency of smoking, binge drinking, physical activity, and fast-food consumption. We also determine probabilities of belonging to group-based trajectories by key social characteristics including sex, race/ethnicity, and adolescent family socioeconomic status (SES). Results reveal five discrete group-based trajectories across an approximately 16-year period. Some group-based trajectories can be socially defined as "healthier" and "unhealthier", and others as transitioning from "unhealthier" to "healthier" and vice versa. Results also suggest variation exists in group membership probabilities by social characteristics. As examples, women had a significantly lower probability of membership in the group that took up heavy smoking and increased binge drinking in their late twenties than men, and individuals with higher adolescent SES had greater likelihoods of being in the "healthier" trajectories. Overall, there are distinguishable groupings of the development of health-related behaviors across young adulthood and into early midlife, and variation exists by social characteristics.

## **Health behaviors**

Preferences for Tailored Physical Activity Interventions among adults with Systemic Lupus Erythematosus: A Qualitative Study Deena Aboul-Hassan\* Deena Aboul-Hassan, Nikhita Mahajan, Alaa Alawamleh, Brooke Bailey, Johari Summerville, Moriah Ma, Kennedy Ellis, Dominique Kinnett-Hopkins, Rachel Bergmans,

**Background**: Physical activity can help manage symptoms associated with systemic lupus erythematosus (SLE) and promote overall wellbeing, yet many individuals with SLE do not meet recommended physical activity guidelines. Qualitative approaches are ideal for prioritizing lived experiences to identify preferences regarding physical activity in SLE. We aimed to characterize preferences of a PA intervention among adults with SLE to inform the development of a tailored intervention.

**Methods**: We used a qualitative, interpretive description approach involving semi-structured interviews with adults with SLE. We tailored our approach and interview guide based on feedback from diverse representatives of the study population. Our theme development focused on the recommendations for designing targeted physical activity interventions for SLE patients.

**Results**: This study included 31 interviews (100% female, age range = 24-65 years). Our analysis identified three key themes: 1) Desired autonomy over physical activity choices empowering long-term engagement, 2) "Within my capability of my body": aligning physical activity options to physical limitations, and 3) Motivations to stay active enhancing social and emotional well-being

**Conclusion**: This study highlights the importance of designing physical activity interventions that cater to the specific needs and preferences of individuals with SLE. Our results offer valuable insights into key factors to consider when developing physical activity interventions for individuals with SLE.

## **Health behaviors**

Social Norms and Tobacco Use in China: Change under Pressure Shaon Lahiri\* Shaon Lahiri,

**Introduction:** Tobacco use is a global epidemic that depletes the human capital of nations, particularly in China, the world's largest manufacturer and consumer of tobacco. While the most effective tobacco control approaches are price-based, they falter in settings with weak implementation and enforcement of tobacco control policies. Social norms are a promising avenue of tobacco reduction through the development and maintenance of anti-tobacco norms, which can exert social influence in the absence of strong regulatory conditions. However, the evidence for the influence of social norms change on tobacco use in China is severely lacking. This is further complicated by the infiltration of tobacco industry into social norms around gifting in China, and the state's monopoly on tobacco manufacturing and sale. How social norms around tobacco use related to actual tobacco use over time in this setting?

**Methods:** We fit several Bayesian latent growth curve models to understand how social norms and tobacco use unfold over time in China, using longitudinal data from adult smokers, collected by the International Tobacco Control Policy Evaluation Project. The data cover nine years across four cities in Mainland China. We also conducted moderation and exploratory mediation analyses to understand how contextual factors influence the norms-tobacco use relationship.

**Results:** Change in social norms significantly predicts change in tobacco use over time, even after controlling for several known confounders such as addiction level. Descriptive norms exert a particularly strong and stable influence on tobacco use. This relationship was robust to missing data in sensitivity analyses.

**Conclusions:** The perceived frequency of others' behavior is a potent influence on tobacco use, and group-based approaches for tobacco control should be considered for hardened adult smokers, focusing on reducing actual smoking behavior within local networks, as opposed to approval of smoking.

## **Health behaviors**

Examining the Willingness to Utilize Telehealth among Women Who Own a Smartphone and Live in Urban Areas of Nigeria Promise Emmanuel\* Promise Emmanuel, Katelyn Coburn,

In Nigeria, women face significant barriers to accessing healthcare, including long distances to healthcare facilities, lack of autonomy, stigma surrounding reproductive and sexual health concerns, and the outright unavailability of primary and specialty care. Telehealth (i.e., the use of information and communication technologies for the purpose of advancing the health of individuals and their communities) holds a promise of facilitating healthcare access by eliminating physical distance barriers to obtaining quality healthcare and contributing ease and privacy. Yet, limited research has been conducted on its use in Nigeria, particularly how it is perceived and how it might be received. Guided by the Theoretical Framework of Acceptability, this study seeks to address this gap by exploring Nigerian women's perceptions towards telehealth and assessing for factors that might influence willingness to use telehealth. Two hundred and eighty-eight adult women living in urban areas of Nigeria completed an online survey. Preliminary analysis revealed that most respondents reported willingness to use telehealth (93.0%), with 69 (25.3%) reporting to be very willing and 152 (55.7%) reporting to be willing. Although 50.0% of the respondents reported having heard about telehealth, only 74 (27.2%) reported prior experience with using telehealth, out of which 46 (69.7%) and 14 (21.2%) reported positive and very positive experiences with using telehealth respectively. This exploratory analysis provides insight into how well telehealth might be accepted by Nigerian women and suggests that although only a few respondents have previously utilized telehealth and only half of the respondents had been aware of telehealth before the survey, most are willing to utilize it to meet their healthcare needs.

*Keywords:* telehealth, women's health, healthcare access, telemedicine, healthcare behavior, theoretical framework of acceptability

## **Health behaviors**

Parenthood's unequal toll: Inequities in cardiovascular risk factors by sociodemographic context Whitney Wells\* Whitney Wells, Fan Xia, Jacqueline Torres, Rita Hamad, Anusha Vable,

**Background:** For the 28 million parents of young children in the US, the demands of parenthood can increase time pressure and financial stress, prevent health maintenance, and potentially impact health into midlife. Health consequences related to parenthood likely vary by sociodemographic context, but evidence is limited.

**Method:** We used National Health Interview Survey 2000-2018 waves to examine the relationship between parenthood and cardiovascular disease risk factors: physical activity, alcohol use, smoking, sleep, and body mass index (n=151,765 parents, n=375,220 non-parents). We adjusted for sociodemographic factors, year, and region, and examined effect modification by sociodemographic factors.

Results: Parents (vs non-parents) had lower odds of being physically active (OR: 0.69; 95% CI: 0.67, 0.71), higher BMI ([]: 0.14; 0.08, 0.20), and fewer hours of sleep per night ([]: -0.19; -0.21, -0.18). Parents also had lower odds of being a current drinker (OR: 0.78; 0.77, 0.80) or current smoker (OR: 0.81; 0.79, 0.83). We found heterogeneity in all outcomes by sex, race, ethnicity, income, and relationship status (p-values for interaction <0.05). Stratified results showed pronounced differences by income (low-income parents had greater increase in BMI but smaller decrease in smoking and drinking) and race and ethnicity (BMI increase was greater among Hispanic, Asian, and Other race/ethnicity parents, decrease in drinking was greater among White and Asian parents, decrease in sleep was greatest among White parents).

**Conclusion:** While U.S. parents have lower use of alcohol and smoking, they also have worse physical activity, BMI, and sleep vs non-parents. Parents may feel increased pressure to reduce unhealthy behaviors, but may also face structural challenges in maintaining cardiovascular health, particularly low-income and minoritized parents. Family support policies to alleviate time and financial pressures may be crucial in supporting parents' health.

## **Health behaviors**

Adverse childhood experiences and lifetime non-fatal overdose among a community-recruited sample of people who use drugs in New York City: A latent class analysis Mehrdad Khezri\* Mehrdad Khezri, Fabiha Rahman, Amanda M. Bunting,

Background: Adverse childhood experiences (ACEs) are linked to a range of negative health outcomes, yet few studies examine distinct ACEs patterns and their association with non-fatal overdose among people who use drugs (PWUD), despite high trauma rates in this population. We examined latent classes of ACEs and their associations with non-fatal overdose in PWUD in New York City (NYC).

Methods: We conducted a latent class analysis of 247 PWUD using self-reported ACEs, including emotional and physical neglect, emotional, physical, and sexual abuse, household mental illness, household substance use, domestic violence, parental separation/death, and household incarceration. Multivariable logistic regression assessed associations of ACEs classes with lifetime non-fatal overdose, adjusting for sociodemographics and substance use severity. Results: The mean age was 46.1 years, 74.9% were men, and 43.3% reported a lifetime non-fatal overdose. A five-class model best fit the data: 1) no/low ACEs (26.3%), 2) experienced all ACEs (13.0%), 3) household dysfunction (parental separation/death, household substance use) (25.1%), 4) household dysfunction + emotional, physical, and sexual abuse (19.4%), and 5) emotional and physical abuse (16.2%). Compared to no/low ACEs, those in the experienced all ACEs class (aOR 4.92; 95%CI 1.71-14.9) and in the household dysfunction class (aOR 3.14; 95%CI 1.31-7.77) had higher odds of non-fatal overdose. Other factors associated with non-fatal overdose included unstable housing (aOR 2.73; 95%CI 1.40-5.42), moderate/high cocaine use disorder (aOR 2.60; 95%CI 1.05-6.71), and moderate/high opioid use disorder (aOR 4.25; 95%CI 2.07-9.14). Conclusions: Findings highlight heterogeneity in childhood adversity among PWUD and suggest that those who experience a broad spectrum of ACEs may be at higher risk of non-fatal overdose. Addressing early-life trauma in harm reduction and treatment interventions may help mitigate overdose risk in this population.

# Health care/services

"I still have the pain, the pain hurts": Examining treatment journeys of people with opioid use disorder across the lifespan Tracy Nichols\* Tracy R. Nichols, Sajib Rana, Meghann Reeder, Sophie Roe, Melissa N. Poulsen,

Opioid use disorder (OUD) is a chronic disease that often co-presents with other mental and/or physical health disorders, including chronic pain. Recovery from OUD frequently involves entering and exiting multiple treatment centers, self-treatment endeavors, and engaging with other healthcare services and providers. Medication for Opioid Use Disorder (MOUD) treatment options and access have been increasing, yet little is known about how accessing MOUD coincides with other healthcare needs. Since the needs and concerns of people who use drugs (PWUD) change across the lifespan, it is also important to understand treatment experiences at different life stages. A deeper understanding of experiences accessing services can inform strategies for increasing care engagement for this population. This presentation will describe the application of a life course perspective to PWUD's experiences engaging in MOUD treatment services.

Using narrative analysis, we examined treatment journeys across the lifespan from 34 telephone interviews conducted with people who had received MOUD from an outpatient addiction treatment program within a healthcare system in a geographically diverse region of Pennsylvania. Participants' ages ranged from 22 to 70 years with an even distribution by gender. The interview guide prompted participants to share their unique treatment journey of MOUD treatment, allowing them to describe other relevant care interactions. Transcripts were re-storied and then compared and contrasted within and across age groups.

This presentation will focus on how the role of chronic pain and other co-morbid conditions affect the treatment journeys of people with OUD across the lifespan. Example stories will be presented that illustrate the interaction of MOUD treatment with other healthcare experiences and chronic conditions. Stories will also be used to highlight potential cohort effects embedded within treatment journeys. Implications for care engagement will be discussed.

# Health care/services

Trends in treatment provision for mental Illness and substance use in the United States from 1997 through 2024 Marilyn Sinkewicz\* Marilyn Sinkewicz, Clarke Philippa, Iris Gomez-Lopez,

Economic and health shocks, such as the COVID-19 pandemic and the opioid crisis, have intensified concerns about the mental health of adults and children in the United States. Recently, the Surgeon General declared a public mental health emergency. In the decades-long struggle to support various populations, mental health and substance use (MHSU) treatment provision has been guided by limited evidence, e.g. research on specialty services by psychiatrists, select geographic areas, specific user groups, and discrete time periods. To improve planning, policy, and programs, this study uses national longitudinal neighborhood-level data from a wide range of public sources to examine the evolving nuances of MHSU treatment provision from 1997 through 2024. We analyze these novel data and produce heat maps and geospatial hot spot maps to show overall patterns and trends, as well as particular dynamics by source of treatment, demography, and geography. Initial findings reveal that MHSU treatment is delivered by a wide variety of providers and facilities, and that the overall density of treatment provision increases over time. However, the distribution of treatment provision is uneven at the turn of the 21th century, and differences widen over the next 24 years. For example, the density is higher and growth is faster for non-specialty treatment provision (primary care physicians, non-physician providers, and support centers) than for specialty treatment (psychiatrists, and psychiatric hospitals and non-hospital facilities). Also, source-specific trends differ with respect to their trajectories, geographic impact, and demographic groups affected: urban neighborhoods widen their advantage over rural areas; economically affluent neighborhoods improve more than disadvantaged ones; and white neighborhoods progress more than black and Hispanic neighborhoods. By contrast, psychiatric hospitals become concentrated in rural areas, particularly disadvantaged rural and black rural areas.

#### Health care/services

Explainable Machine Learning Insights into Multi-Level Social Determinants of Treatment Refusal Among HPV-Associated Cancer Patients Ryan Suk\* Ryan Suk, Maryam Kheirandish,

**Purpose:** This study employs machine learning and SHAP (SHapley Additive exPlanations) values to examine the predictive impact of multi-level social determinants of health (SDoH) and clinical factors on the refusal of recommended treatment among HPV-associated cancer patients.

**Method:** A retrospective analysis was conducted using the SEER-Medicare data (2004–2017) for cervical, vaginal, vulvar, penile, anal, and oropharyngeal cancers. We incorporated individual-level socio-demographic (age, sex, race and ethnicity, marital status, insurance) and clinical factors (cancer site and stage, comorbidity) as well as zip code-level factors (education, income), censustract-level poverty, and county-level rural-urban status. The XGBoost (eXtreme Gradient Boosting) classifier predicted treatment refusal, addressing class imbalance with adaptive synthetic (ADASYN) sampling approach. Model performance was evaluated using SHAP values.

**Results:** The cohort included 67,421 patients. The model achieved 98% accuracy, with F1 scores of 0.67 (radiotherapy refusal) and 0.72 (surgery refusal). Key predictors of radiotherapy refusal included cancer stage, cancer site, area-level income, comorbidity, race, and state of residence. Surgery refusal was influenced by age, cancer stage, marital status, insurance, cancer site, and area-level factors such as poverty, education, and income. Patients with localized malignancies, cervical or oropharyngeal cancer, aged 65–75, and living in areas with <20% poverty were more likely to refuse radiotherapy. Surgery refusals were more common among younger patients, those with in-situ or localized malignancies, and those in areas with low-income or low-education levels.

**Conclusion:** These findings highlight the role of multi-level SDoH in treatment decisions and can guide tailored interventions and policies to improve equitable cancer care. Personalizing approaches based on key predictors may help reduce disparities and improve HPV-associated cancer outcomes.

Health care/services

Patient-Centered Medical Home Programs and Hospital Readmissions: Evidence and Insights from Community Engagement Xiao Li\* Xiao Li, Jae Man Park, Jialing Zhu,

#### INTRODUCTION

The Patient-Centered Medical Home (PCMH) model is a transformative approach to primary care that emphasizes patient-centered, team-based, and coordinated services. Prior research demonstrates that PCMH implementation enhances patient experience and care quality; however, limited studies explore the mechanisms through which these improvements occur. This study examines the mediating role of physician communication in the relationship between PCMH services and hospital readmissions for Chronic Obstructive Pulmonary Disease (COPD) and Heart Failure (HF).

#### **METHODS**

We utilized a national sample of 1,073 U.S. acute care hospitals, integrating data from multiple nationwide sources. Our data of independent variable (PCMH services) and covariates (hospital characteristics) were from 2019, while our mediator (physician communication ratings) and dependent variable (30-day unplanned readmissions for COPD and HF) span from 2020 to 2023. Structural Equation Modeling was employed to assess the mediation pathway and quantify the indirect effects of PCMH services on hospital readmissions.

# PRELIMINARY RESULTS RESULT/IMPLICATIONS

Our results suggest that PCMH services had a marginally positive effect on physician communication ratings in the first year (2020) and a stronger, more sustained positive effect in the following years (2021–2023). Higher physician communication ratings were marginally associated with lower COPD readmission rates and strongly associated with lower HF readmissions. However, there was no strong statistical evidence that physician communication ratings served as a mediator between PCMH services and hospital readmissions, though the directional trend suggests a potential negative effect. Our findings suggest that PCMH services improve physician communication over time. However, while physician communication is important for patient care, its mediating effect on hospital readmissions remains uncertain. Future research should investigate specific PCMH components, such as care coordination, discharge planning, and post-acute follow-up, contribute to reducing hospital readmissions and identify the underlying mechanisms driving these effects.

#### References are available upon request

Health care/services

Medical Mistrust and Adverse Childhood Experiences: Understanding Age-Specific Patterns in Black Women's Healthcare Access April Bell\* April Bell, Angela Wiley, Cheryl Moyer, Sativa Banks, Leslie Schneider, Sirry Alang,

# **Context and Objective**

Mistrust in healthcare systems, shaped by historical and systemic inequities, poses a significant barrier to care for Black women. Adverse Childhood Experiences (ACEs) have been linked to mistrust, but the interplay between age, ACEs, and mistrust remains underexplored. This study aims to examine how ACEs influence mistrust among Black women to inform targeted, trauma-informed interventions.

## **Setting and Population**

This study utilized demographic and survey data from Black women across three age categories: younger adults (18-24), middle-aged adults (25-44), and older adults (45+). The data included healthcare access patterns, mistrust scores, and ACE assessments, allowing for the analysis of both individual and systemic factors influencing mistrust.

# **Study Design**

This is a cross-sectional analysis using self-reported data on healthcare usage, ACE scores, and mistrust levels. Linear regression models evaluated the relationship between ACEs and mistrust, with age group as a moderating factor. Additional descriptive statistics and correlation analyses were used to identify trends in healthcare utilization and demographic patterns.

#### **Outcomes and Results**

The linear regression model examining the effect of age group and ACE score on medical mistrust was statistically significant, F(3, 434) = 8.26, p < .001, and explained 5.4% of the variance in medical mistrust ( $R^2 = .054$ , adjusted  $R^2 = .048$ ). Mistrust was highest among younger adults (18-24) and declined significantly with age, with older adults (45+) exhibiting the lowest mistrust scores (p < 0.001). Higher ACE scores were associated with increased mistrust across all age groups, with the strongest effect observed in younger adults. ACEs had a weaker influence on mistrust in the 45+ group, likely due to cumulative resilience and longer-term relationships with healthcare providers. Younger adults also demonstrated greater reliance on emergency care, correlating with higher mistrust levels. In contrast, older adults predominantly utilized primary care, reflecting greater stability in care access and lower mistrust.

#### **Conclusions**

The findings highlight the compounding effects of ACEs and mistrust on healthcare utilization among younger Black women. Trauma-informed and age-specific interventions are crucial to address mistrust and promote equitable healthcare engagement. Early intervention for younger adults and sustained trust-building measures for older adults are essential to mitigating the long-term impacts of ACEs on healthcare relationships.

Health care/services

Exploring public attitudes about religiously affiliated health care settings in the U.S. Marian Ali\* Marian Ali, Margaret Tait,

**Background:** A considerable percentage of U.S. healthcare institutions are religiously affiliated, yet we know relatively little about how these affiliations shape public attitudes regarding trust and fairness in healthcare or if individuals are aware of a healthcare institution's religious affiliations. The present research examines whether people recognize the religious affiliation of a health system, and how they perceive the quality of care, bias, and institutional trust based on the religious identity of a hospital. We focus on Muslim communities because there are no religiously affiliated health systems in the U.S. that are affiliated with the Muslim faith.

**Methods:** This analysis of pilot data (n=52) will focus on descriptive statistics of perceptions of fairness, discrimination, and bias in religiously affiliated healthcare settings, presenting results among Muslim and non-Muslim respondents. Additionally, qualitative analyses will be conducted on an open-ended question assessing whether respondents recognize the religious affiliation of a hospital, providing deeper insight into how institutional identity shapes perceptions of healthcare access and equity.

**Results:** Among all respondents, 60% reported that the religious affiliation of a hospital, when different from their own, deters them from seeking care there. Considering the sample of respondents who identify as Muslim, this value is 70%. When asked about trust, 15% responded that they disagree that their medical needs would be placed above all considerations. Preliminary analyses of open-ended comments suggest low public awareness of the role of religious affiliation in healthcare provision.

**Conclusion:** The research has significant implications for healthcare access, policy-making, and religious diversity in medical institutions. Informing patients of possible limitations of services and rights as healthcare consumers is necessary to ensure trust and fairness in treatment.

# Health care/services

# CT Utilization for Headache and Back Pain: System-Level Variation and Length of Stay Impacts Vernon Herbener\* Victoria Beal, Erika Johnson,

## Background

Significant variation in CT utilization persists across health systems. This leads to unnecessary resource utilization, increases costs and imposes additional financial and time burdens on patients, along with the risk of unnecessary testing. This research aims to quantify the inter- and intra-system variation in CT utilization and assess the incremental length of stay (LOS) associated with CT use in the emergency department (ED).

#### Methods

Using the Vizient Clinical Data Base, health systems with three or more EDs were identified across the U.S. Variation in CT scan utilization was measured within and across health systems for encounters with a diagnosis of headache/migraine disorders (ages 18-44 and 45-64) and nonspecific neck and back pain (ages 45-64 and 65+). Additionally, the incremental LOS associated with CT utilization in the ED was calculated.

#### Results

Across 64 health systems, the mean aggregate system-level CT utilization rate in the ED ranged from 33-56% across age groups and diagnoses, with an interquartile range of 7-12%. Within-system variation in utilization ranged from approximately 11-47%. The increase in ED LOS for encounters with a CT scan was roughly 1 additional hour compared to those without a CT scan for headache/migraine diagnoses. For nonspecific neck and back pain, the incremental increase in LOS was approximately 1.25 hours.

# **Implications**

Health systems provide the potential for scaling best practices to ensure the right care is delivered at the right place and time. However, patients continue to experience differing care both within and across health systems. Discretionary CT utilization in the ED can impact capacity management and increase healthcare costs for patients and health systems. To enhance consistency, cost-efficiency, and quality of care, health systems should examine and refine their quality procedures to ensure standardized, evidence-based decision-making across all sites of care.

Health care/services

Psychological distress and cannabis use among adults: Examining the role of usual health care Celina Morales\* Celina Morales, Annie Ro,

**Background:** Adults who are in psychological distress and unable to access healthcare may turn to legalized drugs marketed for stress relief, such as cannabis. This study investigates the relationship between past 30-day psychological distress and cannabis use frequency and whether location of usual source of health care moderates this relationship.

**Methods:** Data from the 2021, 2022, and 2023 adult California Health Interview Survey was used. The Kessler Psychological Distress Scale was used to measure past 30-day distress. Cannabis use frequency in the past 30 days was measured as 0 days, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, 30 days or more. Location of usual source of health care was coded into five categories: (1) doctor's office, HMO, or Kaiser; (2) clinic, health center, or hospital clinic; (3) emergency room or urgent care; (4) other place or no one place; or (5) no usual source of care. Ordinal logistic regression models tested the hypothesized relationships adjusting for covariates (age, sex, race, poverty level, marital status, insurance status, language proficiency, and year). All analyses were survey weighted.

**Results:** Of the 67,548 adults included in our analysis, 15% had used cannabis in the past 30 days and 8% reported past 30-day psychological distress. Experiencing past 30-day distress (Adjusted Odds Ratio (AOR)=1.99; 95% CI: 1.65, 2.39; p<0.001) and having no usual source of care (AOR=1.20; 95% CI: 1.03, 1.40; p<0.05) were associated with greater frequency of cannabis use. The interaction term between location of usual source of healthcare and distress were not significant. Older age, being female, Asian, Latino, and having fair/limited English proficiency were associated with lower frequency of cannabis use.

**Conclusion:** While psychological distress is associated with past-month cannabis use independently, the direction and strength of this relationship does not depend on the respondents location of usual source of health care.

Health equity

Everyday and Healthcare Discrimination at the Intersection of Socioeconomic Status Factors Meman Diaby\* Meman Diaby, Delvon T. Mattingly, Luis Zavala Arciniega, Shyanika W. Rose, Carrie B. Oser,

**Background**: Discrimination is the unjust treatment of individuals based on identity characteristics, such as socioeconomic status (SES). It occurs across various settings, including healthcare and public spaces, and is recognized as a social determinant of health.

**Method**: We analyzed imputed data from the All of Us Research Program (version 7) to examine the prevalence of the Everyday Discrimination Scale (EDS) (range: 0-5) and Healthcare Discrimination Scale (HDS) (range: 0-4) at the intersection of SES factors (n=117,688). We assessed mean discrimination scores across every possible combination of SES, or homeownership (home owner, renting), annual household income (high income, middle income, low income), employment status (employed, unemployed), and educational attainment (advance degree, college graduate, some college, high school graduate/less than high school), conducted ANOVA to compare inter-group differences, and used a visualization tool to display these complex patterns.

**Results**: Mean discrimination scores were low (EDS = 0.80; HDS = 0.57), but differences across intersecting SES groups were statistically significant (p<0.001). Renters, lower-income, unemployed, and lower educated (high school graduate/less than high school for EDS and some college for HDS) adults reported higher discrimination on average. A four-way intersectional analysis revealed that unemployed renters with some college education and low incomes reported the highest discrimination (EDS: 1.44, 95% CI: 1.39-1.48; HDS: 0.97, 95% CI: 0.94-1.00), while retired homeowners with lower education and high incomes reported the lowest discrimination (EDS: 0.45, 95% CI: 0.37-0.52; HDS: 0.39, 95% CI: 0.37-0.41).

**Conclusion**: Discrimination is most common among renters, the unemployed, and those with lower income or education. Healthcare discrimination reflects everyday discrimination, exposing structural inequities across settings and emphasizing the need for systemic change.

Health equity

Collaborative Pathways to Health Justice: Lessons from Houston's Health Equity in Action Summit Himika Rahman\* Himika Rahman, Esperanza Galvan, Chethan Bachireddy,

Houston, Texas experiences substantial health inequities demonstrated by the stark 20-year gap in life expectancy between neighborhoods separated by just a few miles. These disparities, which stem from historical discrimination and structural barriers to healthcare access, are both unjust and preventable. In response, The Harris Health Sheila Jackson Lee Center for Accelerating Health Equity (CArE) hosted the inaugural Health Equity in Action Summit in February 2025 to bring together diverse stakeholders to co-create meaningful solutions through authentic community engagement. CArE serves as Harris Health's central hub for coordinating and accelerating health equity initiatives, with an initial focus on addressing disparities in heart health through building trust, developing data insights, disrupting drivers of inequities, advocating for change, and fostering sustainable partnerships.

The Summit convened over 120 participants from across Houston's diverse neighborhoods, strategically recruiting a balanced mix of health system and community leaders. The event featured multiple engagement formats: panel presentations pairing health system and community leaders to showcase successful partnerships; an interactive poster session highlighting innovative equity initiatives; a ceremony honoring health equity champions; and structured networking opportunities.

Qualitative analysis of participant feedback revealed four key themes: 1) community-centered approaches addressing health-related social needs, 2) structural interventions dismantling geographic barriers to care, 3) sustainable accountability mechanisms ensuring ongoing community participation, and 4) centering marginalized voices through intentional representation and power-sharing in program design.

The Summit represents a significant innovation in health equity work and a replicable framework for creating a structured space for co-creation between a major safety-net health system and the community it serves.

Health equity

Engaging our Community Resources to Better Serve Our Patient Population Kelly Galloway\* Kelly Galloway, Alice Antwi,

Introduction: The Health Equity Project (HEP) at Albany Medical College has partnered with the Department of General Pediatrics at Albany Med Health System since 2019 to address social determinants of health (SDoH) and promote health equity by connecting families with community resources. In 2023, 39% of all positive SDoH screenings indicated at least one environmental concern for housing, utilities, and home. Families often face challenges with unaffordable rent and utilities, poor housing conditions, increasing eviction rates, and subsidized housing with multi-year waiting lists. In contrast, community organizations and government programs face funding, capacity issues, and staff turnover. We sought to identify existing gaps in the community's housing resources and enhance collaborative efforts among community-based organizations (CBOs) and healthcare institutions.

**Methods:** Inclusion criteria for CBOs included those with programs related to Homeless and Family Services, Financial Housing services, Environmental/ Weatherization services, Legal Housing Aid, and Home Repairs in the Capital Region. From January – March 2024, using established relationships and a snowball method approach 19 organizations were collected to participate in a survey and a semi-structured interview.

**Results:** Survey participation had a 100% (19/19) response rate. 35 housing programs/ services were identified in the survey. The top three counties' programs that provide service include Albany, Schenectady, and Rensselaer. Semi-structured Interviews had 47% (9/19) participation, and 12 additional services/ programs were identified during the process.

**Lessons Learned:** A deeper knowledge of programs and services available in our community and the importance of keeping regular communication with CBOs.

Health equity

Strengthening Healthcare Access in Pennsylvania: The Launch of the Rural Health Coalition Madeline Bernard\* Madeline Bernard, Fornessa Randal, Paula Lozano, Eugene Lengerich, Susan Perrine, Chieko Maene, Jeremy Chia, Sandy Rosario,

25% of Pennsylvanians live in rural designated areas, while 22% live in health professional shortage areas. The Center for Advancing Health Equity in Rural and Underserved Communities (CAHE-RUC), a part of Penn State College of Medicine, launched the Rural Health Coalition (RHC) as a partnership between academia, health systems, federally qualified health centers (FQHCs), and rural health clinics to address challenges in rural healthcare delivery and improve access for these .

In formation of the RHC, CAHE-RUC considered rurality in proximity to urban-populated areas with PSU Health facilities. Working outwards from PSU locations in south-central PA, the team identified counties with high rates of key health indicators that are exacerbated by lack of medical services, including chronic disease care and cancer screening. Out of surrounding counties, 6 of them do not have an FQHC or rural health clinic located there, while being considered a fully designated rural area, highlighting the need for a collaborative network.

The 17-county catchment area is home to 3.1 million people, whose rural population experiences above average rates of chronic illness, including heart disease, and cancer. The coalition was formed between PSU and 5 FQHCs/Rural Health Clinics working across south-central PA. Each organization represents communities of minority, rural, and medically underserved populations with unique challenges, including primary and specialty provider shortages and structural barriers to care, for the collaborative network to address.

The RHC was formed by identifying rural counties surrounding urban areas with PSU-COM locations, medically underserved areas, and populations experiencing disease that can be prevented or managed by accessible care. The RHC will address the structural, community, and health equity needs for healthcare access and delivery within the catchment area, through a multi-level integrative and collaborative model.

Health equity

# Cardiometabolic Health Among Diverse Emerging Adults in the 3E Study and NHANES Lindsay Hoyt\* Lindsay Hoyt, Lucia Calderon, Giovanna Rafanello, Omisha Sangani, Dixie Blumenshine, Ryan Gamba, Robert Ream, Tatyana Bidopia, Natasha Burke, Alison Cohen,

Emerging adulthood (ages 18-24) represents a particularly sensitive period for studying the emergence of cardiometabolic health inequalities in the United States, as young people begin to establish paths towards higher education, the labor market, and healthy lives. However, previous studies are often limited by small samples or lack of strong measurement. The new 3E Study provides a unique opportunity to examine both cardiometabolic and socioeconomic factors among emerging adult (EA) college students from diverse backgrounds. This paper aims to describe the distribution – and gender, racial/ethnic, and socioeconomic differences – of key cardiometabolic health indicators (weight, height, BMI, waist-hip ratio, blood pressure, diagnosed hypertension, and medication use) within the 3E Study sample and in comparison to the most recent data from EAs enrolled in NHANES (2021-2023).

Compared to NHANES (N = 511), our ongoing cohort already has 1003 EAs enrolled. Importantly, the 3E Study includes larger samples of Asian (33% vs. 26%) and Latine (37% vs. 8%) participants, who are historically underrepresented in cardiometabolic health research. Overall, BMI and waisthip ratio were similar between the samples, as were differences by race/ethnicity, and poverty status. However, we observed a larger percentage of obese young adults in NHANES (26%) as compared to 3E (16%). On the other hand, 3E young adults (32%) were more likely to have high blood pressure than NHANES (24%). Overall, these findings suggest that it is feasible to collect robust cardiometabolic data at scale among EAs, though college students may differ systematically from the broader EA population in ways that warrant careful consideration. Ultimately, the 3E Study aims to advance the field by identifying unique educational and economic predictors of health—factors not captured in NHANES— expanding the social determinants framework for understanding cardiometabolic health among diverse EAs.

Health equity

Community-Engaged, Interdisciplinary Innovations in Primary Care to Advance Health Equity Shelby Wyand\* Shelby Wyand, Joanne Odom, Carol Davis, Karey Sutton, Lori Leibowitz, Cristy Geno Rasmussen, Janine Rethy,

Background: MedStar Georgetown University Hospital's Division of Community Pediatrics (DCP), in Washington, D.C., launched an initiative to address systemic health inequities by integrating medical, financial, social, and community-based services. The effort partners with families and local organizations to address food insecurity and the financial health of families.

Setting/Population: The project aims to transform primary care through innovative, scalable models during its planning phase (January 2024–June 2025). It focuses on two programs: Food as Medicine (FAM), which scales an existing intervention to a larger clinic with sustainable financing models, and the MedStar Georgetown Medical-Financial Partnership (MFP), which designs a legal and financial model to address financial health in primary care.

Methods: Using an innovative Community-Based Participatory Research (CBPR) approach, this interprofessional initiative places community voices at the heart of its design and evaluation. Significant emphasis is placed on the design phase, during which local partners, including families, community organizations, and service providers, actively collaborate to co-create and tailor intervention strategies. A inter-professional team team that includes health equity research, legal advocacy, policy analysis, health economics, and clinical practice works together to develop these models, integrating iterative feedback loops and structured community advisory boards to capture both quantitative outcomes and qualitative insights. This deliberate, inclusive planning process ensures that the interventions are culturally and contextually relevant and sets the stage for long-term sustainability and success.

Conclusions: This project provides a model for the power of a collaborative team in creating innovative, sustainable health service models. Embedding community-driven approaches within primary care promises to improve health equity, resilience, and outcomes for underserved populations.

Health equity

"My castle, I call it because it's all mine right now": Preliminary results from a communityengaged qualitative study of housing needs and pathways to housing among older homeless adults Ashley Truong\* Ashley Truong, Maria Javier, Robin Freeman, Cynthia English, Kelly Doran, Giselle Routhier,

The United States is experiencing an emerging crisis of aging homeless adults. While studies have examined the unique health and housing needs of older adults experiencing homelessness, few have leveraged community-engaged approaches to explore their pathways from shelter to housing and identify rehousing solutions responsive to their specific needs. In this qualitative study, we explored experiences exiting shelter for permanent housing among older adults in New York City, including their unique health needs. We worked collaboratively with five people with lived experience of homelessness as an older adult, two community organizations, and one government agency serving homeless adults to develop interview guides, recruit participants, and interpret results. This presentation will discuss preliminary results from interviews with currently and formerly homeless older adults, as well as the community engagement process. We conducted template and matrix analyses to identify common themes related to barriers and facilitators to the housing search process, housing needs and preferences, and changes in their lives since regaining housing (for those who were formerly homeless). Findings underscore the unique experiences of older homeless adults, the need for targeted interventions to reduce and end homelessness among this population, and the importance of community-engaged research at the intersection of homelessness and health.

Health equity

The Health of Racialized Bicultural Populations Over the Life Course Arinala Randrianasolo\* Arinala Randrianasolo,

Robert Park's (1928) Marginal Man theory describes an individual that lives within two societies, but is never fully a part of either. Park's Marginal Man theory of bicultural populations could be applied to two populations in the United States. The first bicultural population is the 1.5 immigrant generation. The 1.5 immigrant generation advance through the life course in American culture while also likely experiencing their sending country's culture at home. Prior research has found that the foreign-born population has health advantages when compared to the native-born population. The second population is that of the multi-ethnoracial population. The hyperdescent hypothesis states that multi-ethnoracial individuals' health could iterate towards the racial category that is more socially advantage or mirror its health outcomes. Despite the possible health advantages that come with being a bicultural population, being racialized in the United States could render the advantages of biculturalism ineffective. Given the theoretical advantages, this research project asks if the racialization process in the United States results in similar health outcomes for bicultural populations. I hypothesize that in childhood, the 1.5 generation will have better health outcomes than the multi-ethnoracial population but those advantages will deteriorate in adulthood.

Data will come from the National Longitudinal Study of Adolescent to Adult Health (Add Health). The sample will consist of two bicultural groups. The outcome variable will be two health outcomes, asthma and migraines. The main predictor variable will be foreign born status as it will differentiate between the two populations in the analysis. The analysis will involve running logistic regressions to see if foreign-born status is positively associated with the health outcomes listed above.

Health equity

Assessing Needs and Expertise for the National Center for Engagement in Diabetes Research (CEDER) Aditi Luitel\* Laura Wyatt, Stephanie Albert, Mona AuYoung, Claire Cooper, David Lounsbury, Aditi Luitel, Karina Ramirez, Emma Rodgers, Jennifer Zanowiak, Sandra Albrecht, Chau Trinh-Shevrin, Arleen F Brown, Earle Chambers, Nadia S Islam,

**Introduction & Objective:** CEDER aims to enhance community engagement and equity in type 2 diabetes (T2D) research through a research consultation and community engagement studio model. Phase 1 included a needs and assets assessment (NAA) of potential CEDER clients and experts engaged in T2D research. Results on identified needs and expertise are presented.

**Methods:** The 20-minute NAA was administered to a purposive sample of individuals engaged in T2D programs or research, including CEDER members, nominated individuals, and NIDDK-funded researchers from June-November 2024; respondents received a gift card. The NAA covered 11 aspects of conducting research (e.g., funding, data collection, dissemination); question phrasing differed based on respondent type (researcher, service provider, both). Participants rated challenges (not at all to extremely challenging) and experience (leading/participating in 0 to 10+ projects) for each aspect. Aspects were considered needs when 325% selected "Very or Extremely challenging." Experience on 3+ projects identified expertise. Descriptive analyses were run overall and stratified by respondent type.

**Results:** The NAA was completed by individuals from various sectors, geographies, and populations of interest, and consisted of researchers (n=94), service providers (n=29), and both (n=67). Most were women (70%) and identified as an ethnic minority (57%); 21 US states were represented. Needs included: (1) finding/securing funding (44%), (2) sustaining programs/partnerships (32%), and (3) recruiting/retaining participants (27%). Expertise included: (1) data collection/management (80%), (2) collaboration with partners (74%), and (3) data analysis (74%).

**Conclusion:** The NAA identified needs, as well as availability of diverse expertise, across the US. This can be leveraged to support T2D equity research through CEDER activities/resources. Variability was identified by respondent type and will be presented in final analyses.

Health equity

# The First Steps Towards Solving Medicare: An Analysis of the End Stage Renal Disease Model Aarush Tutiki\* Aarush Tutiki,

Abstract: End-stage renal disease (ESRD) patients despite being only 1% of Medicare beneficiaries, account for 7% (\$35.9 Billion) of Medicare Spending. They have higher readmissions rate, higher mortality rate, and are more expensive than other Medicare population. To improve patient outcomes and increase cost savings for these patients, Medicare established an incentive rewards program called the Comprehensive ESRD Care (CEC) model. Dialysis centers, patients, and providers across the country were sorted into groups called ESCO (ESRD Seamless Care Organizations). My analysis will help policymakers build payment models to improve the health outcomes of the vulnerable population.

Rationale: Understanding what makes certain ESCOs successful would improve patient quality, reduce mortality, and increase cost savings. Understanding the Medical economics behind this would have significant extensions into the Medicare's Accountable Care Organizations, which serve a full third of the American Population.

Methods: Success of the program was measured by three metrics: Standardized Mortality Ratio, Overall Total Quality Score, and Savings Rates. The standardized independent variables used were a series of ESCO specific datasets and Demographic data. Results were compared using direct visual cues from graphing, linear regression modeling, and cluster analysis (K-Means with the Elbow Method).

Results: Programs with less young people, a higher percentage male, and a higher percentage of the general population without health insurance see higher savings. Programs with a lower ratio between provider and patients and higher incomes see lower mortality rates. A plan of care for falls had a significant relationship to Mortality Rates, and Diabetic Eye Exams had a significant relationship to Overall Quality. Out of 37 participants: 26 had lower than expected Mortality Rates (SMR < 1). The 26 with better than expected mortality had, on average, a mortality ratio of .88.

**Health systems** 

"Stayers" and "Leavers": Perceptions on what motivates and discourages paramedics remaining in primary health care facilities in Kakamega county Kenya Nema Aluku\* Nema Aluku.

**Background:** Kenya continues to experience a growing gap of health care workers at all levels of service provision. Retention of health workers due to motivational causes amongst others has been cited as the major contributing factor. This study examines factors influencing retention of health workers in primary health care facilities.

**Methods:** A cross sectional study design using semi – structured questionnaires was used for the study. 93 healthcare workers of different cadres at government health facilities in Kakamega County participated in the study. Descriptive analysis was used to profile the characteristics of the respondents; Chi square tests were used to determine the differences between respondents who had stayed ("Stayers") at their working station for a period of at least two years prior to the study or those who had left ("Leavers") within the same time. Multinomial Logistic Regression was used to perform an analysis of the extent of each factor that was considered significant in determining whether healthcare personnel stayed or left.

**Results:** Age, duration of working, flexibility and ability to balance work and personal life, fair evaluation, administrator's competence, manageable work load and equipment were statistically associated with whether healthcare workers would leave or continue staying at their current work stations.

**Conclusion:** The results show that financial incentives are not the only factors in retention of health workers. Competent administrators are required for enhanced retention of health workers at primary health facilities. Deducing from the results, social and professional factors are key in retention of primary health care workers. The following measures are recommended; placement of competent administrators; provision of equipment to do the necessary work; work – family balance to be instituted as a means to retaining professional motivated primary health workers in Kakamega county.

**Health systems** 

Building an Integrating Risk-level Tailored Clinic to Community Response to Prevent Child Maltreatment Erin VanEnkevort\* Erin VanEnkevort, Lisa Bailey-Davis,

Pennsylvania does not systematically collect risk factors related to child maltreatment despite having child abuse and neglect rates on par with the national average. The lack of systematic collection stifles the development of interventions to prevent child maltreatment. At Geisinger, a large integrated health system, we developed ALLIANCE with the goal of identifying families at risk for child maltreatment and connecting them to personalized resources that improve mental health, resilience, and prevent child maltreatment. We first captured demographic, health, and social factors through the electronic health record (EHR), and then assess childhood experience risk by implementing the Adverse Childhood Events (ACEs) questionnaire as a screener.

**Methods.** During the pre-implementation phase of ALLIANCE, we completed activities in 3 areas: Engagement, Consideration of Feasibility, and Readiness Planning. Example activities included engaging stakeholders, responding to problems and solutions, obtaining funding, identifying data assets and strategies to address gaps, understanding clinical workflow and referral pathways, developing a predictive risk model with existing EHR data, implementing patient-reported ACEs and integrating results with clinical decision support

**Results.** Stakeholders identified problems and potential solutions. Specifically, to address the lack of systematic tracking and develop a secondary prevention effort, ALLIANCE was developed, and funding was acquired from the Degenstein Foundation and Department of Health and Human Services. Geisinger EHR was identified as a data asset but there was a gap in ACEs collection. A review of literature informed variable selection to develop a predictive risk model using Geisinger's EHR. Clinical decision support was built, and clinical staff will receive training about the model and the referral infrastructure.

**Conclusion.** ALLIANCE may serve as a model to prevent child maltreatment for other rural health systems.

**Health systems** 

Transforming Detection: Assessing the Impact of Task Shifting in Nurse-Led Breast Cancer Screening in Rural Ghana Callia Nickles\* Isabella Dunn, Nigel James, Charlotte Ofori,

#### Introduction

Breast cancer is the most prevalent cancer among women in sub-Saharan Africa, yet early detection remains low, especially in rural areas with limited access to specialized care. In Ghana, where breast cancer affects women in their prime working years, late-stage diagnoses contribute to poor survival outcomes. This study evaluates the effectiveness of task-shifting by training community health nurses to conduct clinical breast examinations (CBEs) in rural settings.

# Methodology

This nested study is part of a broader initiative to enhance breast cancer screening in rural Ghana. Using a concurrent mixed-methods design, we assess feasibility, effectiveness, and challenges in task-shifting. Twelve community health nurses trained in CBEs will complete pre- and post-training surveys measuring knowledge, confidence, and preparedness. Semi-structured interviews with nurses, medical personnel, and screened women will provide qualitative insights into provider-patient perceptions, implementation barriers, and sustainability. Quantitative data will track changes in knowledge and preparedness, while thematic analysis will explore qualitative experiences.

# **Preliminary Findings**

Early field reports indicate increased confidence among trained nurses and positive patient perceptions of nurse-led screenings. However, barriers such as lack of private examination spaces and socio-cultural factors hinder screening uptake. Data collection will conclude by June 30, 2025, with further analysis refining these findings.

#### **Significance & Policy Implications**

This research informs policies on workforce training and breast cancer screening expansion. Demonstrating the feasibility of nurse-led screenings as a cost-effective strategy, findings can guide task-shifting integration, scale-up efforts, and community-based healthcare strengthening to improve early detection, reduce mortality, and advance health equity in rural Ghana and similar settings.

## Infants/children/youth

# The Impact of Year Round School (YRS) Calendars on Childhood Obesity in Texas Nomita Bajwa\* Nomita Bajwa,

Introduction: Childhood obesity is a pressing public health issue associated with higher lifetime risks of mortality, morbidity, and a reduced quality of life. Texas consistently ranks in the bottom among the high rates of childhood and adulthood obesity. School environments play a significant role in the prevention of childhood obesity; however, school based health promotion initiatives focused on physical activity and nutrition have not shown sustained benefits. Traditional school schedule with long summer breaks

have been associated with accelerated weight gain in at-risk populations reversing the benefits of interventions. Year-round school(YRS) calendars which have shorter more frequent breaks, may provide a protective effect on weight status, but data is limited due to the small percentage of schools following a YRS calendar. Texas, with over 5 million enrolled students in over 9500 campuses, allows for both traditional and YRS calendars and provides a unique opportunity to address this gap in the literature.

Objective: This study examined the association between school calendars and weight-related health risk among Texas public school students.

Methods: We are conducting a cross-sectional secondary analysis of publicly available datasets from the 2022-23 school year. Logistic regression will be used to explore the association between school calendars and weight-related health risk (no risk, some risk and high risk) among 7th grade students attending public schools in Texas.

Results: The preliminary analysis indicates that 580 school campus have a 7th grade class, with 95 YRS campuses. A detailed analysis will examine how socio-economic and other school-related characteristics influence the association between school calendar type and weight-related health risk.

Conclusion: This study provides insights into how school calendars are associated with weight related risk factors and how it might impact decision making around school schedules.

#### **Infectious or Microbial**

Reducing Existential Risk By Reducing The Allure Of Unwarranted Antibiotics: Two low-cost interventions Nick Byrd\* Nick Byrd, Olivia Parlow,

Over one million annual deaths have been attributed to bacterial antimicrobial resistance. Although antibiotics have saved countless other lives, overuse and misuse of antibiotics increases this global threat. Developing new antibiotics and retraining clinicians can be undermined by patients who pressure clinicians to prescribe unnecessary antibiotics. So we validated two low-cost, scalable interventions for improving antibiotic decisions in an online randomized control trial and a preregistered replication (N=985). Both first-person vignette experiments found that an infographic and text message caused intermediate to large improvements in antibiotic decisions compared to active controls — even when controlling for a dozen confounds. Notably, these educational interventions also reduced trust in a clinician who offered antibiotics for an upper respiratory infection. These data show how low-cost adjustments to existing communication systems can teach people to reduce the existential risks of antibiotic resistance and how inappropriate antibiotic prescribing can erode trust in health systems.

# **Interventions/Programs**

# Collaborating with CHWs in coaching faith-based organizations in delivering evidence-based health promotion programs Rebecca Selove\* Rebecca Selove, Jayla Berry,

Community health workers (CHWs) are recognized as key members of the professional healthcare workforce. They play a pivotal role in providing health education for residents of disenfranchised communities and establishing and sustaining links between community residents and healthcare providers.

This presentation will provide an overview of the development of training and delivery of technical assistance (TA) by CHWs and academic researchers to enhance capacity in churches that serve African American communities in Nashville. Teams of church members are implementing evidence-based health promotion programs (EBPs) to reduce risk for chronic health conditions that affect African Americans disproportionately. The TA, also referred to as coaching, was developed to be delivered by dyads of CHWs and academic researchers, with the long-term goal of developing a manual that church teams can use to train new teams, including those from other congregations. The TA integrates the complementary implementation science tools of an implementation readiness survey based on the Consolidated Framework for Implementation Research (CFIR), Getting To Outcomes, Stages of Implementation Completion (SIC), and Expert Recommendations for Implementing Change (ERIC) strategies. Training includes recorded lectures, role plays, review of video-taped TA sessions, and tailoring the TA to the EBP selected by the church team and their readiness survey results.

Each TA dyad prepares a structured evaluation of each TA session, and TA session transcripts are reviewed for GTO and ERIC elements. Each church team provides a brief anonymous evaluation of each session as well. Preliminary feedback from CHWs indicates that the approach fits well with their previous CBW training and orientation. Early feedback from church teams indicates that the TA is helpful and relevant. The training will be refined through iterative evaluation with CHWs and with feedback from participating church implementation teams.

## **Interventions/Programs**

Evaluation of a Provider Training Program to Shift Prescribing Practices in Primary Care Shutong Huo\* Shutong Huo, Mandana Masoumirad, Glen Xiong, Ariel Neikrug, Robert McCarron, Tim Bruckner.

Background: Benzodiazepines (BZ) remain widely prescribed for mental disorders despite known risks of dependence, misuse, and overdose. Recent clinical guidelines recommend limiting chronic BZ use in favor of long-term antidepressants (AD). Some continuing medical education (CME) interventions can encourage this shift, yet little evidence demonstrates their impact. We assess whether a CME program in California reduces BZ prescribing relative to AD among primary care providers (PCPs) compared to a control group with no training.

Methods: We analyzed data from 176 PCPs participating in a publicly insured health program in Southern California between 2017 and 2021. Of these, 38 received the CME training, while 138 did not. We extract quarterly provider-level prescription data and calculate an AD/BZ ratio. Using a two-way fixed-effects difference-in-differences model, we account for both provider-level fixed effects and time fixed effects.

Results: Over time, the BZ/AD ratio among both treated and control groups declined over the study period. Post-CME training, the treated provider cohorts exhibited an approximate 20% decrease in the BZ-to-AD prescribing ratio compared to the control group (

Conclusion: These findings suggest that a CME program reduces benzodiazepine prescription while promoting antidepressant use, underscoring the effectiveness of educational interventions in aligning prescribing practices with guidelines. If replicated in larger samples, these findings support CME program effectiveness in enhancing adherence to clinical practice guidelines as well as the potential to improve patient safety.

## **Interventions/Programs**

Community Engagement in Childcare Behavioral Health: Professional Development and Support for Rural Childcare Directors and Teachers Through ECHO for Childcare Providers Rachel Tyrone\* Rachel Tyrone, Torrey Robinson, Bradley Long,

Background: According to the CDC, 1 in 6 children aged 2–8 has a diagnosed mental, developmental, or behavioral health disorder. Among these children, approximately 16% will spend, on average, 35-40 hours a week in a community childcare setting. When considering that many childcare providers may be the first line of early identification of developmental differences, it is imperative that this workforce be equipped with knowledge and tools on early childhood development. However, given the minimal educational requirements among childcare providers, that can differ across states, childcare providers may lack foundational knowledge in early childhood health and development. Therefore, the Project Extension for Community Healthcare Outcomes (ECHO) model bridges this gap by providing access to child development experts for guidance on early childhood health and development, managing classroom behaviors, promoting early intervention, and support among childcare workers. The ECHO model has been found to be an effective method to foster community engagement. This tele-mentoring program is designed to create a virtual community of learners by connecting community partners with content experts, using video-conference technology (Zoom), brief didactics, and case studies, fostering an "all learn, all teach" approach.

**Purpose:** This study examines the impact of training community childcare providers using the Project ECHO model to enhance child health outcomes in Mississippi through interactive learning sessions.

**Methods:** Childcare providers across Mississippi were recruited for the Fall 2024 Project ECHO cohort through an online application disseminated by the Mississippi State Department of Health Childcare Licensure Office. Eligible centers were required to participate in the Child Care Payment program and were invited to enroll one director and two teachers. The cohort was divided into childcare directors (n = 27) and teachers (n = 48). Each cohort attended 10 virtual sessions covering topics such as classroom management, child development, and behavior management...

## **Interventions/Programs**

"Very similar, but very different?" The role of CHWs and behavioral health paraprofessionals in population health Binoli Herath\* Binoli Herath, Mindy L. McEntee,

## **Introduction and Objectives**

Community health workers (CHWs) are lay community members trained to deliver culturally appropriate outreach and health education. CHW's broad competencies has lead to employment under many job titles. Lack of standardization in training/career pathways cause confusion with adjacent professions such as behavioral health paraprofessionals (BHTs/BHPPs) and peer recovery support specialists (PRSS). All provide supportive services bridging healthcare gaps, but differ in scope, certification, and billing requirements. This ambiguity affects professionals, employers, and clients. This study examined how CHW trainees with prior BHTs/BHPPs/PRSS training perceive role distinctions.

#### **Methods**

Structured interviews were conducted with trainees enrolled at Arizona State University CHW training program cross-trained as BHTs/BHPPs/PRSS. Interviews were audio-recorded, transcribed, and thematically analyzed.

#### Results

Data collection is on-going; seven participants were interviewed (5 female; 25-62 years; 2 White (non-Hispanic), 3 Hispanic, 1 Black, 1 other). Interviews explored training experiences and role comparisons. Training duration varied but generally brief, most learning occurring on-the-job. Participants were unable to clearly distinguish CHWs from adjacent roles –perceived overlaps, differing mainly by setting.

# **Discussion**

Role ambiguity has significant implications for workforce development. Addressing this is critical to establish professional identity and interprofessional collaborations. Inadequate support leads to burnout, turnover, switching to adjacent professions, reducing workforce and increasing demands on remaining workers.

# **Conclusions & Recommendations**

Clearer guidelines, explicitly defined scope on overlapping vs unique responsibilities among CHWs and adjacent professions are necessary. While cross-training may increase marketability, improving working conditions and establishing a living wage are essential for workforce retention.

LGBTQ+

A Youth-Led Participatory Action Research Approach to Examining Safety and Allyship towards LGBTQ+ Youth Populations Francesco Osso\* Francesco Osso, Maria Rosario, Starr Acosta, Ethan Amaya, Lindsay Till Hoyt,

LGBTQ+ youth safety and allyship remain critical social and developmental issues, especially in private, religiously affiliated schools (Stewart et al., 2015). Traditional research overlooks perspectives of LGBTQ+ populations, dismissing their voices and their needs. Youth Participatory Action Research (YPAR) offers a transformative approach to LGBTQ+ research and advocacy, empowering youth to shape their communities (Ozer, 2017). This study aims to (1) examine attitudes toward LGBTQ+ inclusivity in a private, religious, all-boys school in NYC and (2) develop an action plan to address key issues.

In total, 303 students (Mage = 16.03, SD=1.08) completed an online survey, including open-ended questions on LGBTQ+ allyship and safety. Most students identified as heterosexual (94.2%) and cisgender men (96.1%), with 70.5% identifying as Hispanic/Latine or Black/African American. An inductive thematic analysis was conducted, with coding through an iterative, refined process involving high school and college co-investigators.

Two overarching safety themes emerged: *Environmental Awareness* and *Identity & Self-Affirmation*. Students display confidence in their sexuality with assurance of their heterosexuality while also recognizing aspects of the environment that could impact peer safety. Five overarching allyship themes emerged: *Hostility Towards Community, Neutrality Through Community Separation, Transparent Alignment with Community, Connection between Self & Others,* and *Contradictory Justifications*. While some students expressed allyship, many held misconceptions of allyship fueling divisive opinions on LGBTQ+ populations.

Findings reinforced persistent, harmful attitudes towards LGBTQ+ populations' well-being. In response, we designed Students Together for Acceptance, Respect, and Support (STARS). STARS will provide LGBTQ+ youth and allies with mentorship, education, and community-building opportunities, supporting those lacking resources in their NYC schools or neighborhoods.

LGBTQ+

# Structural Heteropatriarchy, Sexuality, and Stress-Related Physiological Functioning Among Black and White Young Adult Women Sylvie Tuder\* Sylvie Tuder,

Recent literature shows that structural heteropatriarchy (SHP) is a determinant of women's reproductive health, and that these associations are patterned by race/ethnicity and sexuality. Still, little is known about the role that SHP plays in shaping other stress-related health outcomes among young adults, particularly for population subgroups of women. Using Waves I, III, and IV of the National Longitudinal Study of Adolescent to Adult Health (N = 4,696), I conduct a race-stratified analysis exploring the relationship between SHP and allostatic load—a marker of stress-related physiological dysregulation—for young adult (average age 28) Black and White females while also focusing on differences in the association by sexual minority status. I find evidence that higher levels of exposure to SHP during adolescence and early adulthood are positively associated with allostatic load during young adulthood for both Black and White women. Findings also support effect modification by both race/ethnicity and sexuality. Specifically, SHP is more strongly associated with allostatic load among White sexual minority young women than among White heterosexual young women. SHP is positively associated with allostatic load for all Black women, regardless of sexuality. This study contributes to the sociology of women's health by developing our understanding of the ways that contextual social inequality manifests in the bodies of multiply marginalized women.

LGBTQ+

# Trans(ition): Gender Identity and Desire for Medical Transition in a United States Policy Context Lee Brady\* Lee Brady,

The desire to pursue gender affirming medical treatment, including hormone replacement therapy and gender affirming surgeries, is common among transgender, nonbinary, and gender diverse populations. Medical transition is widely utilized to treat diagnoses of gender dysphoria (previously gender identity disorder) in trans individuals; however, a significant contingent of trans people report little to no desire for transition-related medical intervention. Although access to medical transition is largely understood to have positive impacts on mental and physical health outcomes for transgender individuals, no studies to date have explore the variation in desire for gender affirming medical care among transgender individuals of different gender identities, and the role of local legal climate.

Using data from the 2015 United States Transgender Survey (n = 23,380), this study assesses the associations between gender identity and desire for medical transition among transgender adults in the United States. Further, the influence of state-level social policy climate is analyzed as a potential explanatory factor for this variation in desire for transition-related medical care.

Results indicate that gender identity is a strong predictor of desire for medical transition, with transgender women reporting less desire for medical transition compared to either transgender men or nonbinary individuals. Social policy climate, however, was not associated with desire for medical transition.

This analysis of the gender identity groups who most desire medical intervention in their transition, and the associations between desire and indicators of stigma highlight a need for comprehensive legal protections for transgender populations and healthcare access across the United States. This more nuanced understanding suggests that a one-size-fits-all policy on gender affirming care does not effectively address the needs of the transgender individuals in the United States.

LGBTQ+

Examining the Relationship Between Sexual Minority Status and Sources of Social Support Tai Simpson\* Tai Simpson, Kaylee Wilson, Stephanie Hernandez,

**Background:** Social support is considered a protective factor against negative physical and mental health outcomes. However, the disparities that exist in the source of support have not been widely explored for sexual minorities (SMs).

**Objective**: This study examines social support disparities between SMs and non-SMs in the U.S., disaggregating by social support sources.

**Methods**: We used data from Wave V respondents (aged 33-44) in the National Longitudinal Study of Adolescent to Adult Health (2016-2018). Analyses were restricted to participants who had no missing information on SM status and covariates, in addition to having complete information on social support from at least one source. Our final analytic sample consisted of 10,154 participants who were split into subgroups based on the source of support from friends (n = 9,878), spouse (n = 8,639), and family (n = 10,026). We examined associations between SM status and social support separated between sources of support by friends, spouse, or family using binary logistic regression.

**Results**: Sexual minorities had lower rates of reporting at least one form of social support from spouses, friends, and family compared to non-sexual minorities, but these differences were only significant for social support from family (SM = 84%; non-SM = 91%, p = 0.004). After adjusting for sociodemographic and socioeconomic factors, sexual minorities were 45% less likely to report social support from their families (p = 0.01) than those who did not identify as a SM. No significant differences in spousal support or friend support were found.

**Conclusion**: Sexual minorities experience less social support from their families, underscoring the importance of community support and chosen family in ensuring the health and wellbeing of SMs. This also emphasizes the need for targeted interventions and policies that support building community within SM communities.

## Life-course/developmental

The Impact of Early Adversities on Sexual Assault Risk in Emerging Adulthood Amongst Young Women: A Longitudinal Analysis Using the Future of Families Survey Diana Augustin\* Diana Augustin,

This study examines the impact of early life adversities—specifically parental incarceration and homelessness during adolescence—on the risk of experiencing sexual assault in emerging adulthood among young women in romantic relationships. Adolescent homelessness, which we are defining as youth living "doubled-up" without paying rent or experiencing literal homelessness, and parental incarceration are critical experiences that may disrupt typical developmental trajectories. Adolescents are particularly vulnerable to these adversities due to their heightened sensitivity to social and economic precarity, the potential for school disruptions, and involvement in risky behaviors. These challenges are compounded by the fact that adolescence is a time of heightened vulnerability to sexual assault. The research question guiding this study is: How do experiences of parental incarceration, homelessness, and related adversities in adolescence separately and jointly influence the risk of sexual assault in emerging adulthood? The study is grounded in the Life Course Perspective, which posits that early adversities can disrupt developmental pathways and increase vulnerability to future harm, including sexual victimization. Using Waves 6 and 7 of the Future of Families and Child Well-being Study data, this longitudinal analysis tracks participants from adolescence into emerging adulthood, focusing on young women's experiences of sexual assault. The primary independent variables are parental incarceration and homelessness during adolescence, with sexual assault in emerging adulthood as the dependent variable. Control variables include family poverty, race/ethnicity, mental health history, peer relationships, and material hardship. We hypothesize that individuals who experienced parental incarceration or homelessness during adolescence will report higher risks of sexual assault in emerging adulthood. Moreover, we expect that the cumulative effect of these adversities will be exacerbated by current socioeconomic disadvantage and material hardship, further increasing vulnerability. Multivariate regression analyses will be used to assess the relationships between these early adversities and sexual assault risk, while controlling for potential confounding variables. We anticipate significant associations between both parental incarceration and homelessness in adolescence and increased risk of sexual assault in adulthood. Additionally, we expect that socioeconomic status and material hardship will moderate these relationships. The findings will contribute to understanding the pathways through which early adversities affect later outcomes, especially sexual violence, and will have implications for policy and practice. Interventions for at-risk youth, particularly those experiencing parental incarceration and homelessness, will be crucial in mitigating the long-term risks of sexual victimization.

## Life-course/developmental

The Impact of Violence Exposure on Allostatic Load: Applying SLCMA to Examine Violence Timing and the Protective Role of Adolescent Social Support Ariana Burga\* Ariana Burga, Shanting Chen,

With nearly 60% of U.S. youth exposed to violence, understanding how exposure timing affects physiological health outcomes is critical for designing effective interventions. This study uniquely applies the Structured Life Course Modeling Approach (SLCMA), a novel method that allows simultaneous comparison of competing temporal hypotheses—sensitivity periods (specific developmental stages as critical windows), accumulation (cumulative burden over time), and recency (proximal exposure having stronger effects)—on allostatic load without inflating family-wise Type I error. Using Add Health data Waves 1-5, this study tracks violence exposure (witnessing and direct) across Adolescence (13-18) through Established Adulthood (30-45), and measures allostatic load via 12 biomarkers at Wave 5, spanning cardiovascular, metabolic, inflammatory, and neuroendocrine systems. Additionally, this research examines adolescent social support as a moderator, innovatively analyzing both overall support and its components (peer, school, and social connections) to determine which types most effectively buffer the physiological impacts of violence. It is hypothesized that 1. the accumulation model will best explain allostatic load, with adolescence as a particularly vulnerable period; and 2. higher adolescent social support will buffer cumulative exposure's effects, with specific types of support offering distinct protective benefits. Data analysis is currently underway, with preliminary results expected by the conference date. By systematically comparing temporal patterns of violence exposure and exploring multidimensional social support as a buffer, this study identifies when violence most deeply embeds biologically and highlights adolescence as a pivotal period for school-based interventions. These findings aim to inform targeted public health strategies leveraging existing institutional frameworks to mitigate lifelong physiological dysregulation linked to youth violence.

## Life-course/developmental

Cumulative Burden of Housing Insecurity Among Children in the United States from Birth to Adolescence Giselle Routhier\* Audrey Renson, Matthew Fowle, Sarah Pachman, Giselle Routhier,

**Background:** Housing insecurity is a key social determinant of a wide range of health outcomes, subject to large racial inequities, and with a likely sensitive period in childhood. Housing insecurity can manifest in multiple ways and change over time, but previous studies have primarily focused on single dimensions or a single time point. This study examines cumulative burden of multidimensional housing insecurity among children in the U.S.

**Methods:** We used data from n=3,308 children enrolled in the Future of Families and Child Wellbeing Study (FFCWS), designed to be representative of births in 1998-2000 in large US cities. We operationalized multidimensional housing insecurity using repeated measures of eviction, homelessness, doubling up, not paying full rent or mortgage, utility shut-offs, and frequent moves. We estimated cumulative incidence and mean cumulative counts for each measure from age 1-15, overall and by mother's race/ethnicity. Missing data, due primarily to gaps between waves, were accounted for using 2 methods: (i) a lower bound approach that imputes zeros, and (ii) imputation based on jointly modeling all 6 housing insecurity variables given baseline covariates.

**Results:** Between 45% (lower bound) and 71% (modeled) of children experienced at least one form of housing insecurity by age 15. Among children experiencing at least one event, the average number of events was between 2.6 (lower bound) and 6.1 (modeled) by age 15. Children of non-Hispanic Black and Hispanic mothers, compared to those of white mothers, were more likely to experience an initial event of housing insecurity across all forms, but once experienced, had similar numbers of events.

**Discussion:** Our results highlight a massive and cyclical burden of housing insecurity among children in the U.S. Large racial differences in incidence of first events, but not repeated events, suggest that preventive interventions would be most effective at combating racial inequities in housing insecurity.

#### Mental health/function

Exploring the Impact of Social Determinants of Health on a Promotora-led Preventive Mental Health Intervention Among Latines: The Stay Connected Los Angeles Intervention Edward Chauca\* Edward Chauca, Lourde Baezconde-Garbanati, Kayla De la Haye, Rosa Barahona,

#### **Background:**

Promotora-led preventive mental health interventions have shown effectiveness across a range of mental health outcomes among Latine communities. A major characteristic of these interventions is their adaptability to the needs of their target community, thanks to being community-engaged and culturally sensitive. However, more research is needed to discern whether there are subgroups who benefit more from these interventions than others.

# **Research question:**

To explore which subgroups might benefit more from these interventions, we examine how social determinants interact with a promotora-led preventive mental health intervention. We use data from the Stay Connected Los Angeles (SCLA) intervention, a campaign focused on mitigating the impact of COVID-19 among Latines in Los Angeles, 2020-2022.

# **Significance:**

The increasing implementation of these programs in community and clinical settings requires a deeper understanding of the social and structural determinants that affect them in order to maintain their effectiveness in bigger settings and with multiple populations.

#### **Methods:**

SCLA consisted of a 6-week promotora-led intervention with a mental health component. Participants (n=58) completed pre- and post-intervention surveys. The mental wellbeing outcomes are (1) PROMIS mental health score, (2) loneliness, (3) hyperarousal (impact of events), and (4) limitations due to emotional problems. To assess the interaction between social determinants and the SCLA intervention, we use mixed-effects models.

#### **Results:**

Loneliness, hyperarousal, and limitations due to emotional problems show significance in the prepost analysis. PROMIS mental health score shows significance among participants living in the U.S. for less than 20 years. Hyperarousal shows significance among participants living in a household where the number of members was altered during the pandemic. Education and food security also show significant interactions with loneliness.

#### Mental health/function

"These experiences kill you emotionally": Examining the Interconnectedness of Suicidal Ideation, Emerging Adulthood, and Race Kaleea Lewis\* Kaleea Lewis,

Emerging adults (18-25) endorse the highest rates of suicidal thoughts and behaviors, which is a significant predictor of future suicide attempts and completion. Suicide is the third leading cause of death for Black emerging adults living in Missouri. Despite major advances in research investigating risk factors for suicidal ideation, targeted work focusing on Black emerging adults is limited and existing scholarship rarely questions the role of racism and reasons why Black emerging adults may engage in suicidal thoughts and behaviors. Using qualitative methods, this study intends to expand current knowledge by exploring Black emerging adults' (1) thoughts and beliefs about suicide and suicidal ideation and (2) perceptions of, at the intersections of race and developmental stage, the increasing rates of suicide occurring among Black emerging adults.

In-depth interviews were conducted with 30 self-identified Black emerging adults residing in Kansas City, Missouri. Interviews explored participants' (1) experiences of obstructed use and suicidal ideation and (2) how they make meaning of the way structural racism impacts this relationship. Interview data were transcribed verbatim and thematic analysis guided data analysis.

Rich narratives detailing how the participant's conceptualized suicide and the intersections of suicidality, emerging adulthood, and Blackness spanned across the interviews. Candid conservations surrounding personal and/or familial experiences of suicidal ideation and suicide emerged within the interviews (theme 1). Their shared lived experiences also revealed the structural and cultural factors they believe influence and/or increase Black emerging adults' likelihood of engaging in suicidal ideation (theme 2). Study findings expose how cultural nuances surrounding suicidal ideation and suicide shape Black emerging adults' knowledge about suicide and provide racial equity focused data that can aid in suicide prevention efforts.

#### Mental health/function

Hopelessness as a Mediator of the Association Between Parenting Factors and Adolescent Suicidality and Substance Use Among Juvenile-Justice Referred Youth Natalie Guerrero\* Natalie Guerrero, Lauren O'Reilly, Trey Dellucci, Casey Pederson, Zachary Adams, Leslie Hulvershorn, Tamika Zapolski, Matthew Aalsma,

Youth involved in the juvenile justice system are more likely to have a substance use disorder and/or suicidality (e.g., suicidal thoughts and behavior) compared to other youth. Although parental support and monitoring may play an important role in youth substance use and suicidality outcomes, the potential mechanisms have not been elucidated.

Our purpose was to evaluate the extent to which parental support and monitoring were associated with latent, continuous construct scores of suicidality and substance use and to determine whether youths' hopelessness may indirectly affect these relationships among a sample of youth referred to the juvenile justice system.

The sample included juvenile justice-referred youth aged 14-17 (N = 77; 69% White, 58% male, 74% non-Hispanic). The primary predictors of interest were parental support and monitoring, measured by the Parent Support Scale and Parental Monitoring Scale. The primary potential mediator of interest was hopelessness. Linear regression was used to model continuous suicidality and substance use severity scores, measured via a computer adaptive test, on parental support and monitoring. We tested hopelessness as a potential mediator. All analyses controlled for age, sex assigned at birth, race, ethnicity, and family income.

After adjustment, parental support was associated with decreased suicidality severity ( $\beta = -0.30$ , p = 0.002). Parent support and monitoring were associated with youth-reported hopelessness. The indirect mediation effects of hopelessness in the relationship between parental support ( $\beta = -0.18$  [SE, 1.73]), as well as parental monitoring ( $\beta = -0.17$  [SE, 0.20]), and suicidality severity were statistically significant.

Parental support and youth hopelessness may be important intervention targets for improving and addressing disparities in substance use and suicidality among juvenile justice- referred youth. Hopebased interventions may be effectively integrated into existing juvenile justice programs, and their potential to improve both mental health and behavioral outcomes among justice-involved youth should be examined.

#### Mental health/function

Telehealth, assets, and completion of mental health services after suicidal behavior: an analysis using electronic health records Catherine Ettman\* Catherine Ettman, Grace V. Ringlein, Kyungeun Jeon, Priya Dohlman, Jason Straub, Sazal Sthapit, Peter P. Zandi, Elizabeth A. Stuart,

It is unknown how telehealth contributes to mental health services use following suicidal behavior and whether utilization differs across socioeconomic status. Using electronic health records from a cohort of patients with depression in a large urban health system, we assessed patterns in mental health services use after hospital-documented suicidal behavior defined by ICD-10 code for suicidal attempt, self-harm, or ideation (N=687 patients with 7,710 individual telehealth-eligible outpatient psychiatry appointments) from January 1, 2021 - June 30, 2024. First, we estimated whether telehealth was associated with appointment completion (versus no-show or same-day cancellation) in the 6 months following suicidal behavior using generalized estimating equation logistic regression, accounting for multiple appointments per patient, and adjusting for demographic characteristics and comorbidities. Then, we tested for heterogeneity by area financial assets (area deprivation) and social assets (marital status and employment) by adding interactions with telehealth to the models. We found that telehealth appointments had higher odds of completion than in-person appointments (aOR=1.52, 95%CI=1.28-1.80). While we found higher odds of completion of appointments of patients from low deprivation areas (high socioeconomic status) relative to high deprivation areas (aOR=1.62, 1.18-2.26) and married relative to unmarried patients (aOR=1.38, 1.03-1.86), with no significant differences by employment status, we did not find evidence of heterogeneity of the association between telehealth and appointment completion by area deprivation, employment status, or marital status. Telehealth appointments had higher completion than in-person appointments in the 6 months after suicidal behavior. The appointments of patients living in lower deprivation areas and who were married were also more likely to be completed.

#### Mental health/function

Examining the relationships between labor market, family functioning and mental health of native- and foreign-born mothers in the United States Sima Bou Jawde\* Sima Bou Jawde, Carmel Salhi,

**Introduction**: Population health research examines health of families as impacted by economic hardship, but few studies examine the role of labor market and family functioning on women's health.

**Research gap**: Labor market precarity and labor within the household are important aspects of family and immigrant health research but remain virtually understudied.

**Methods**: We use waves 1 and 5 in the Future of Families and Child Wellbeing study to examine the relationship of labor market factors on the mental health of mothers via family functioning. For our exposure, we capture labor market characteristics such as "working more than one job" and "working different shifts." Mother's mental health is captured through Composite International Diagnostic Interview scale (CIDI) reported in wave five. Family functioning is the mediating variable, and an example is "you eat dinner with child in a day". We plan to run a Structural Equation Model to draw significant relationships across labor market factors to mother's mental health.

**Hypothesis**: 1) An exploitative labor market increases mother's mental distress via poor working conditions and decrease family functioning, 2) better working conditions will directly and indirectly decrease mental distress via family functioning, and 3) the relationships strengths and directionality will vary according to nativity status.

**Preliminary & anticipated results**: Labor market structures have a significantly positive direct effect on anxiety ( $\beta$ =0.29, p=0.010), and significantly negative effect on family functioning, like ability to have dinner together ( $\beta$ =-0.26, p=0.006). For stratified anticipated results, we anticipate that foreign born mothers may experience a weaker effect of labor market structure on anxiety, and family functioning may buffer that relationship but to a lesser extent than native-born mothers. Thus, while labor market structures may impact the health of families, its effects are informed by nativity, gender and family functioning in ways that deserve further investigation.

#### Mental health/function

Partisan Differences in State Legislator Tweets about Suicide: A Content Analysis Michal Weiss\* Michal Weiss, Madison Kitchen, Andrew Riblet, Jonathan Purtle,

Textual artifacts of policymakers' public communication reflect their knowledge and attitudes about issues and can also shape public opinion. To inform strategies to dissemination evidence about suicide to policymakers, this study aimed to characterize how state legislators communicate about suicide on X (formerly twitter).

We established search terms and used Quorum, a public affairs database, to identify all state legislator tweets about suicide between December 1, 2023, and November 30, 2024. We developed a codebook, established inter-rater reliability, and used thematic content analysis to characterize the extent to which, and how, policymakers communicate about the causes, solutions, and consequences of suicide. Analyses examined frequencies of themes for all legislators and stratified by political party affiliation.

Of 1,049 tweets identified, 996 were included in coding. Tweets about physician-assisted suicide (8.8%) and war/terrorism (1.8%) were excluded from the primary analyses. About one-third (36.7%) of tweets mentioned causes of suicide, 65.9% mentioned solutions, and 1.4% mentioned consequences. Chi-square tests assessed differences in themes between Democrats (n=567) and Republicans (n=268). Democratic legislators were significantly more likely than Republicans to mention lethal means (e.g., firearms) as cause of suicide (35.1% vs. 17.4% p=<0.001). Democrats were also significantly more likely than Republicans to mention any solution to prevent suicide (77.9% vs. 44.0%, p=<0.001). This remained true of all specific solutions coded, except for clinical services (7.9% vs. 4.5%, p=0.07).

Study results highlight a need to improve the communication of evidence about policy strategies to prevent suicide to state legislators and also suggest a need to tailor messages based on political party affiliation. Further, results indicate that there may be bi-partisan support for suicide prevention strategies that involve clinical services.

#### Mental health/function

Involuntary psychiatric commitments following decline in police stop-and-frisk practice in New York City: A natural experiment Parvati Singh\* Parvati Singh,

Involuntary psychiatric commitments, often initiated through law enforcement or court orders, are significantly more prevalent among Black populations, occurring at five times the rate of other groups. Structural factors, including disproportionately higher surveillance by law enforcement and racial bias in healthcare, may contribute to these disparities. However, whether reductions in police hyper-surveillance (police stops, frisks, searches) can mitigate racial disparities in psychiatric commitments remains unexplored. We leverage a natural experiment to examine the effects of sharp decline in police stops on involuntary psychiatric commitments in New York City. We analyze the impact of the 2012 federal class-action lawsuit against the New York Police Department's stop-question-frisk policy, a practice disproportionately targeting Black individuals. Following the lawsuit, stop-and-frisk encounters declined rapidly, providing an opportunity to assess potential shifts in involuntary commitment trends through a quasi-experimental approach.

Using data from the Healthcare Cost and Utilization Project's State Inpatient Database, we conducted panel interrupted time series analyses to evaluate changes in annual involuntary psychiatric commitments across New York State from 2006 to 2015. The five boroughs of New York City—Bronx, Brooklyn, Manhattan, Queens, and Staten Island—were classified as treated regions, while all other counties in the state served as controls. We designated 2012 as the intervention year and adjusted for key covariates, including autocorrelation, demographic factors (age, sex, race), unemployment rate, and fixed effects for county and year. Results indicate a significant decline in involuntary psychiatric commitments in New York City relative to the rest of the state post-2012 (coefficient = -0.55, p < 0.001). However, stratified analyses reveal that this decline does not concentrate among Black individuals but rather affects Black and all other groups similarly. These findings suggest that while reductions in police hyper-surveillance may correspond with overall declines in involuntary commitments in a population, they alone may not be sufficient to address racial disparities.

## Methodological approaches to studying public health

NIH Office of Disease Prevention: Strategic Plan for Fiscal Years 2024-2028 and Activities to Advance Prevention and Population Health Research Liberty Walton\* Liberty Walton, Elizabeth Neilson, Jacqueline Lloyd,

The Office of Disease Prevention (ODP) is the lead office at the National Institutes of Health (NIH) responsible for assessing, facilitating, and stimulating research in prevention and health promotion to improve public health. ODP aims to increase the scope, rigor, dissemination, and impact of prevention research. The office advances its mission by providing leadership and support for the development, coordination, and implementation of agency-wide initiatives focused on prevention and population health science, guidance to improve the design and analysis of NIH-supported prevention research, and translation of rigorous science evidence into practice. With input from federal partners, the research community, and the public, ODP recently published a new strategic plan. The ODP Fiscal Year 2024–2028 Strategic Plan is a roadmap for NIH collaborative activities to accelerate prevention research and evidence to improve population health and well-being. The poster will highlight the plan's seven strategic priorities and five cross-cutting themes, with a focus on ODP's and NIH's engagement with community and other partners to improve population health. The poster will also highlight resources available to researchers and the public to improve the rigor of research methods in studies and increase the availability, visibility, and impact of prevention and population health research.

## Methodological approaches to studying public health

Community Engagement for Data Collection, Reporting, and Translation: Lessons Learned from the CAlifornia Pacific Islander Well-Being And COVID-19 Economic Survey (CAPIWAVES) Brittany Morey\* Brittany Morey, Sora Tanjasiri, Andrew Subica, Corina Penaia, Cynthia Fok, Shreya Paul, Richard Chang, Christen Marquez, Melenaite Fifita, 'Alisi Tulua, Royce Park, Ninez Ponce,

**Background:** Challenges often arise when relatively small, minoritized, and indigenous communities rely on data to demonstrate and address health inequities, but they are not represented by existing data. Even when data do exist, these data are often not reported back to communities for their use and translation into policies and practices that would address their health needs. We provide a case study of a community engaged data collection and reporting effort to address mental health inequities among Native Hawaiian and Pacific Islanders (NHPIs)—a population that is often not represented in existing mental health and social determinants of health data.

**Methods:** The CAlifornia Pacific Islander Well-Being And COVID-19 Economic Survey (CAPIWAVES) applied community engagement to respondent-driven sampling—a systematic method collecting data on relatively small populations through referrals. Through equitable engagement with community partners in the preparation and data collection processes, CAPIWAVES was successful in collecting a relatively large dataset (n=929) to represent the mental health needs and socioeconomic impacts of the COVID-19 pandemic on NHPI adults in California.

**Results:** Partnering with CHamoru, Fijian, Marshallese, Native Hawaiian, Samoan, and Tongan communities leaders throughout California was essential to the success of CAPIWAVES. Community members were involved in data collection, analysis, interpretation, application, and reporting. Dissemination of findings occurred through webinars, in-person meetings, and a published report. Community engagement continues through efforts to implement the recommendations and translate the findings for future community-based health interventions.

**Discussion:** Our efforts show that the collection, reporting, and application of data on highly minoritized populations to address health disparities is feasible and successful through authentic community engagement.

## Methodological approaches to studying public health

EMPOWER-ed by a Community Driven Process: Elevating the Research Capacity and Priorities of People with Intersectional Experiences of Substance Use and Pregnancy Abigail A. Lee\* Abigail A. Lee, Arielle Estes, Grace Gerdts, Nichole Nidey,

**Background:** Community-engaged research advocates for community participation throughout the research process. This study documents community-led research processes from a multi-year, multi-state community-engaged project focused on improving healthcare experiences for people who have used substances around the time of pregnancy.

**Methods:** In 2019, a Cincinnati-based group of women with intersectional experiences of pregnancy and substance use were recruited to partner in a community-engaged project called EMPOWER. Since then, EMPOWER expanded to a multi-state, online community and EMPOWER Moms trained in research methods and developed research priorities. To investigate their priorities, they created a survey with qualitative questions about healthcare-setting language preferences for people with substance use and pregnancy experiences. In 2024 the survey was distributed to a social media group for women with these experiences, and n=323 people responded to the survey.

A team of lived experience experts and public health experts was formed for qualitative analysis. The team trained in qualitative thematic analysis and Dedoose, co-creating a thematic codebook using deductive and inductive approaches. They established intercoder reliability using 10 survey responses and independently analyzed survey data.

**Preliminary Results:** EMPOWER focused on the co-leadership of EMPOWER Moms, yielding unique research questions and bringing nuance to research design and analysis. Preliminary thematic findings demonstrate that survey participants have standards about how healthcare providers address them, and they are impacted by the language used and environments cultivated by healthcare providers.

**Conclusions:** This community-engaged research highlights the importance of community-driven priorities and leadership throughout the process. Next steps include reporting to EMPOWER Moms for project decision making and disseminating findings to survey participants and healthcare providers.

#### Methodological approaches to studying public health

Psychological Science Approaches to Healthcare Utilization in Underrepresented Populations: Emerging Insights for Primary Care and Public Health Systems Olusheyi Lawoyin\* Olusheyi Lawoyin, Latrice Maric, Elizabeth Stierman, Atim George,

**Background:** Several approaches have been implemented to strengthen quality care delivery in historically underrepresented populations. However, investments aimed at strengthening service delivery in resource limited settings are of limited value if they do not account for the socioecological environment. The purpose of this paper is to present the findings of an exploratory study that examined the socioecological factors influencing prenatal care engagement in an understudied population with one of the highest birth rates, in Southern California in the United States.

**Methods:** This study was grounded in Bronfenbrenner's ecological systems theory and the theory of social constructivism. The sample used in this study included two focus groups that consisted of non-acculturated Hispanic women who were selected through purposive snowball sampling. Participants were further screened for acculturation using an adaptation of the 12-point acculturation scale for Hispanics by Marin et al. (1987), which measured the degree of acculturation in the population. An in-depth questionnaire adapted from the social ecological model (SEM) was used to gather information on the subjective, lived experiences and perspectives of participants. Thematic analysis using a phenomenological approach was used to analyze the narratives of participants in the study.

**Findings:** Sixty-four percent of the study's sample (n = 14) were between the ages 35-44 years (Mage =35.5 years), and 72% had a secondary school education. Ninety-three percent of the sample were married or with long term partners and 79% were stay at home mothers. Four main themes arose based on an analysis of the findings. Overall, the study's significant findings showed us the individual, familial, economic, political and socio-cultural factors from the lens of the participants that served as barriers and facilitators to prenatal care engagement and the perceptions of appropriate care delivery within the population, considering the role of the health system.

**Conclusion:** The findings from this study contribute to a paucity of original research on the socioecological environment and its effect on the engagement of prenatal care in this population. The study's findings have implications for further interdisciplinary research and the design of responsive, integrated health systems that would support appropriate prenatal care delivery in underrepresented populations.

## Methodological approaches to studying public health

# Identifying High-Priority Ecological Indicators of Structural Racism in Black and Hispanic/Latino Communities Alisha Crump\* Alisha Crump, Ester Villalonga-Olives,

#### Aim

Structural racism manifests as a multifaceted phenomenon in which various indicators carry different levels of significance and impact. This study aimed to utilize a theory-driven approach to identify high-priority key ecological-level indicators of structural racism to inform the development of a novel, multilevel, and multidimensional structural racism measure for Black and Hispanic/Latino communities.

#### Methods

The content development team, consisting of four social epidemiologists, pre-selected 68 ecological indicators from previous literature. They used the National Institute on Minority Health and Health Disparities framework to guide their selection. A panel of experts, including five health inequality specialists, three community members, two economic inequality experts, and two psychometricians participated in a three-phase modified Delphi approach. During the process, they discussed the indicators, proposed new ones, and ranked them in the final round. The ranking used a scale from 1 (extremely relevant) to 5 (not at all relevant). The average relevance score for each indicator was visualized using Python Matplotlib and Seaborn for data visualization.

#### Results

We identified 71 ecological-level indicators. Overall, economic-related indicators generally received lower numerical values than environmental factors, suggesting that financial stability measures are priority metrics for measuring structural racism among Black and Hispanic/ Latino communities.

#### Conclusion

This study provides empirical evidence for prioritizing of specific ecological-level indicators when creating measures of structural racism among Black and Hispanic/Latino communities. Next steps involve leveraging the expert panel's relevance rankings to create a weighted scoring system for the structural racism ecological-level index and combine it with individual-level data to create the multilevel measure.

#### Methodological approaches to studying public health

A path to unmute the voice of youth adults in the Bronx to participate in the Crime Prevention Policy Agendas Maria-Isabel Roldos\* Maria-Isabel Roldos, Caroline Davis,

TThe Bronx bears close to one-third of all violent crimes in New York City, and 90% of victims are male young adults between the ages of 24-65 years of age from a racial and ethnic minority. The voice and input of marginal urban young adults living in communities with a high incidence of violent crime are often misunderstood and therefore excluded from research and community practice opportunities. This research project used a cost-benefit analysis method known as contingent valuation - CV and willingness to pay -WTP surveys with two samples of young adults and two research approaches, to capture adolescents' and young adults' input in crime using a Community-Based Participatory Research approach (CBPR). The logic of the CV method is that respondents are asked to think about the public good as if it could be purchased in the marketplace and then they are asked how much they would be willing to pay for it. As such, respondents' willingness-to-pay (WTP) amount reflects the value they place on the public good, which can thus be used as the benefits measure. These methods were used in a quantitative online survey with college students and the second in a qualitative focus group with young adults with exposure to violent crime. The focus of this manuscript is to showcase the opportunity for economic evaluation to involve hard-to-reach community members in research and community-orientated prevention. Through this approach, this project was able to demonstrate young adults and adolescents perceive sexual assault as a higher priority compared to other violent crime offenses, including homicide. The findings of this research, therefore, support that researchers need to be creative to include the voices of young former VC offenders and victims in the prevention discussion. Young adults in this research found the CV methodology innovative and attractive, especially among the college sample. Adolescents in the focus group enjoyed and expressed interest in speaking about economic concepts and the value of life. Results suggest that programs and interventions that illustrate the economic loss to society related to crime such as losses in productivity, costs to health care, and ultimately the societal costs of premature mortality, may engage adolescents in a meaningful conversation about crime prevention

**Migration** 

**Disparities in preterm birth by generation of immigration among Latines** Ashley Judge\* Ashley Judge, Christina Ludema, Kelli Ryckman,

Preterm birth is associated with poor infant outcomes and long-term developmental consequences. Foreign-born Latines typically have better birth outcomes than US-born Latines, but this advantage diminishes with longer US residence. Few studies have separated generation of immigration among US-born Latines (2nd, or  $\geq$ 3rd), due to limited data collected on parental country of birth.

We used data from a prospective cohort study of nulliparous individuals (2010-2013) among eight, clinical US sites, limited to 1581 individuals who self-identified as Hispanic. We used logistic regression models to estimate the odds of preterm birth (PTB) between cross-sectional 1st, 2nd, and ≥3rd generation Latines.

Among n=670 1st generation immigrants, 24% had resided in the US for <5 years and 40% were born in the Dominican Republic (DR). Around half of the 1st generation reported annual household incomes <\$25,000 compared to 30% of the 3rd generation. The prevalence of smoking during pregnancy varied from 8% to 24% between the 1st and  $\geq$ 3rd generation. Compared to the 1st generation, 2nd and  $\geq$ 3rd generation Latines had 0.8 (0.8, 0.9) and 0.7 (0.7, 0.8) times the adjusted odds of PTB, respectively (prevalence: 1st=9%, 2nd=8%, and 3rd=7%). Associations differed by country of origin comparing the 1st and 2nd generations (Mexico: 1.4 (1.2, 1.7), (1st=4%, 2nd=8%); DR: 0.5 (0.4, 0.6), (8%, 5%)). Patterns of reported racial discrimination also differed by country of origin.

At first take, our results suggest a health advantage with increasing generation of immigration, but substantial effect modification by country of origin was observed. Our results suggest increasing social mobility and risky health behaviors in later generations, with more pronounced movement out of the <\$25,000 category for 2nd generation individuals from DR. Our future work includes using decomposition methods to compute the percentage of disparities explained by individual-level and (possibly) neighborhood-level factors.

**Migration** 

Health across the "Skills" Spectrum: Occupational Attainment, U.S. Citizenship Status, and the Immigrant Health Advantage Nicole Samala\* Rebecca Schut, Nicole Samala,

Despite extensive research on the immigrant health advantage (IHA), key questions surrounding immigrant health in the 21st century remain. First, increasing immigrant educational and occupational heterogeneity necessitate further research into immigrant health across the "skills" spectrum. Second, whether citizenship moderates the relationship between nativity and health is underexplored. Third, although much of the IHA literature has focused on physical health, assessing other (e.g., mental health) outcomes can provide a more holistic picture of immigrant well-being.

Using the 2000-2018 National Health Interview Survey, we assess whether immigrant health varies across the "skills" spectrum, measured as Bureau of Labor Statistics "job zones." We also evaluate whether U.S. citizenship moderates the relationship between nativity and health. Outcomes include self-rated health (SRH), mental health (sadness; hopelessness; Kessler (K6) distress scale scores), and healthcare access (health insurance status; whether one has a usual source of medical care).

Immigrants in low skill jobs hold SRH advantages over the low skill U.S. born; this advantage diminishes, but is not eliminated, as skill level increases. Low and mid skill immigrants have lower (better) K6 scores and report less hopelessness than the U.S. born. High skill immigrants report more hopelessness; higher (worse) but statistically insignificant K6 scores; and more sadness. All skill levels of immigrants are less likely to have insurance/a usual source of care.

By citizenship, low and mid skill non-U.S. citizen immigrants have the greatest advantages in SRH and most mental health outcomes. High skill non-citizens report higher levels of sadness. Non-citizens consistently report poorer healthcare access, even at the highest skill levels. Together, findings present a complex picture of the role that skill and U.S. citizenship play in shaping immigrant health, adding important nuance to the existing IHA literature.

**Migration** 

Differential associations between immigrant sanctuary policies and glucose-lowering medication prescription trends by type 2 diabetes severity Danielle Crookes\* Danielle Crookes, Salome Goglichidze, Jennifer Lucas, Miguel Marino, John Heitzman,

Immigration enforcement policies and activities have a detrimental effect on health care usage for immigrants and spillover effects on non-immigrants. The effects of sanctuary policies on mitigating those effects are understudied. Previous work has documented that sanctuary policies were not associated with receiving prescriptions for glucose-lowering medicines among immigrants and nonimmigrants with type 2 diabetes, but it did not explore findings by disease severity. Patients who have uncontrolled blood sugar may be more likely to obtain prescriptions regardless of the policy environment. In this study, we used multilevel logistic regression to examine associations between county-level sanctuary policies that were in place in 2017 and patients' receipt of prescriptions for glucose-lowering medications by patients' recency of diagnosis, HbA1c level, and nativity status. Data included EHR-documented prescription records in a sample of 25,189 patients (18+ years old) (HbA1c always less than 7: n = 5,463, always between 7 and 9: n = 7,651, HbA1c ever more than 9: n = 12,075) seen at OCHIN clinics between 2017 and 2019. Higher odds of receiving at least one glucose-lowering medication prescription each year from 2017-2019 were observed in high sanctuary policy counties (3+ policies) compared with low sanctuary policies (0-2 policies) among newly diagnosed patients (diagnosed in 2017 or after) with HbA1c levels that were always less than 7 (adjusted OR: 2.2 (1.4-3.4)) or between 7 and 9 (aOR 1.4 (1.1-1.9)). No associations were observed between county policy status and receipt of prescriptions among newly diagnosed patients with HbA1c levels ever above 9 or patients with diabetes diagnosed prior to 2017 regardless of HbA1c levels. Most associations did not differ by nativity status. Sanctuary policies may be most influential in facilitating access to prescriptions for patients with type 2 diabetes who are newly diagnosed and when their disease state is less severe.

**Mortality** 

U.S. State Policy Contexts, County Economic Contexts, and Working-Age Mortality Iliya Gutin\* Iliya Gutin, Jennifer Karas Montez, Shannon Monnat, Emily Wiemers, Douglas Wolf,

Geographic disparities are a defining feature of rising U.S. working-age mortality, with state policy contexts and county economic contexts identified as critical macro-level factors. However, neither factor fully explains geographic disparities on its own. Using 30 years of linked data on state policy contexts, county economic contexts, and county mortality, we investigate joint associations between county and state contexts and all-cause mortality among U.S. adults ages 25-64 from 1990 to 2019. The findings reveal that the lowest predicted mortality rates are consistently in counties with low economic insecurity that are also in states with liberal policy contexts. Moreover, counties with conservative state policies generally have higher mortality than counties with liberal state policies, regardless of county economic context. For males, this holds except in the most economically vulnerable counties and counties with the lowest labor force participation, where, regardless of state policy context, mortality rates are similarly high. For females, being in a county with high labor force participation somewhat equalizes mortality differences across policy contexts. Taken together, the novel findings suggest state and county contexts have synergistic associations with working-age mortality and that accounting for both greatly advances understanding of the large and widening disparities in county-level mortality.

**Mortality** 

Racial/Ethnic Disparities in Early Midlife Cardiovascular Disease Mortality among Lifetime Abstainers: Evidence from the 1997-2018 National Health Interview Survey Nishat Tasnim Koli\* Muntasir Masum,

#### Background

Recent research shows that early midlife (ages 25–45) is a critical window for cardiovascular disease (CVD) risk, yet little is known about how lifetime alcohol abstention intersects with race/ethnicity to shape those risks. While moderate alcohol consumption sometimes appears protective for CVD, lifetime abstainers may represent a heterogeneous group, including individuals with poorer overall health or structural disadvantages. This study examines whether racial/ethnic minority lifetime abstainers experience elevated early midlife CVD mortality relative to current drinkers. Methods

Data were drawn from the National Health Interview Survey-Linked Mortality Files (1997-2018), including 183,445 adults aged 25-45 at baseline. The primary outcome was CVD mortality (1,116 deaths). Cox proportional hazards models with mixed effects accounted for sociodemographics (age, sex, education, marital status, income), region of residence, obesity, and smoking. Drinking status was categorized as lifetime abstainer vs. current drinker; race/ethnicity included Hispanic, non-Hispanic White, Black, Asian, and other.

#### Results

Overall, 20% of participants were lifetime abstainers, who on average had lower socioeconomic status, were less likely to be male, and were more likely to be Hispanic or Black. In fully adjusted models, lifetime abstainers had significantly higher risk of CVD mortality than current drinkers (hazard ratio [HR]  $\sim$ 1.30). Racial/ethnic disparities were pronounced: non-Hispanic Black, other, and White lifetime abstainers showed particularly elevated hazards compared to Hispanic current drinkers. For example, among lifetime abstainers, non-Hispanic Black participants had HR=2.36 (p<0.001), and non-Hispanic other race had HR=6.79 (p<0.001), underscoring substantial racial/ethnic inequalities in midlife CVD outcomes.

#### Conclusions

Lifetime abstention was associated with an increased risk of CVD mortality in early midlife, and this effect was most pronounced among non-Hispanic Black and other racial/ethnic groups. These findings highlight complex social and biological pathways that disadvantage specific racial/ethnic minority abstainers, underscoring the need for more nuanced, equity-focused prevention efforts targeting early midlife cardiovascular health.

## Non-health institutions (business, political, education systems)

From Past to Present: Examining the Effects of Historical Racialized Policies on Current-Day Neighborhood-Level Outcomes Pamela Bonsu\* Jessica Jones-Smith, Deven Hamilton, Anjum Hajat, Phil Hurvitz, Yeeli Mui, Julia Wolfson, Keshia Pollack Porter, Kelsey Crawford, Hameenat Adekoya, Jana Hirsch,

Background. A growing body of research on the effects of historical U.S. federal housing and urban planning policies underscores the persistent legacy of legally sanctioned discrimination. We used historical and contemporary data to build on evidence of how structural racism affects the trajectory of neighborhoods over time.

Methods. The sample comprised six cities from the Multi-Ethnic Study of Atherosclerosis. We used shapefiles from Mapping Inequality to identify areas affected by racialized policies: 1) redlining and 2) "urban renewal". We overlaid the shapefiles with U.S. Census boundaries. We estimated mean census tract characteristics for each decennial census year from 1940-2010, overall and by exposure to each policy, both policies, and neither policy. We assessed the associations between these policies and neighborhood characteristics (share of Black residents and median household income) and neighborhood food environment (a food swamp score, subtracting density of healthy food venues from less healthy) using generalized estimating equations and generalized linear models respectively.

Results. Neighborhoods that experienced redlining only (N=1,844 of 5,148) maintained a higher share of Black residents, compared to those that experienced urban renewal only or neither exposure. Neighborhoods exposed to both policies (N=121) had a higher proportion of Black residents and lower median household income for much of the observation period. Neighborhoods exposed to urban renewal only (N=30) had a lower proportion of Black residents and higher median household income. Compared to neighborhoods that experienced neither exposure, neighborhoods that experienced urban renewal only, redlining only, and both policies had relatively higher food swamp scores.

Conclusion. Disparate findings for urban renewal suggest further research is needed to examine the long-term effects of intersecting historical racialized policies.

#### Non-health institutions (business, political, education systems)

How experiences of social determinants shape trust in societal institutional in the United States: insights from a nationally representative study Salma Abdalla\* Salma Abdalla, Catalina Melendez Contreras, Sandro Galea,

**Background**: Institutional trust, critical to effective public health interventions, has been in decline in the US recent years. This study examines how social determinants of health (SDoH) experiences shape trust in institutions.

**Methods**: We analyzed nationally representative data from the Global Social Determinants Survey, conducted in 2024. We assessed associations between demographics, key SDoH (healthcare access; healthcare, housing, and food affordability; perceptions of unequal treatment of people in society), and trust in six institutions.

**Results**: Among 1,012 adults, trust was lowest in corporations (14.0%) and government (16.8%), and highest in scientists/academia (49.8%). Compared to White respondents, Asian respondents had greater trust in scientists (OR=3.39, 95% CI: 1.15-9.97), government (OR=3.28, 95% CI: 1.43-7.52), and mass media (OR=2.60, 95% CI: 1.07-6.32) while other race/ethnicity groups had lower trust. Trust in government was greater among older adults (23.6% of ages 55+ vs. 9.7% of ages 18-24, OR=3.76, 95% CI: 1.32-10.7) and wealthier individuals (23.7% in the highest vs. 6.0% in the lowest income quintile, OR=0.26, 95% CI: 0.11-0.59). Trust in scientists was greater among those with a college degree or more compared to those with primary education (65.6% vs 26.1%, OR=0.20, 95% CI: 0.10-0.40).

SDoH experiences largely predicted institutional trust. Trust in government was greater among those who reported affordable healthcare compared to those who did not (20.9% vs 10.1%, OR=0.43, 95% CI: 0.28-0.65). Trust in other people in the US was greater among those who reported equal societal treatment compared to those who did not (45.9% vs 18.0%, OR=0.35, 95% CI: 0.23-0.54).

**Conclusions**: Low Institutional trust in the US is shaped by demographics and SDoH. Addressing social and economic needs may be a pathway to improving institutional trust, especially if such efforts can leverage scientists' relatively higher credibility with the public.

#### Non-health institutions (business, political, education systems)

**Criminal Legal Supervision and Infant Health** AP Pittman\* AP Pittman, Isabella Bouklas, Daichi Hibi, Michael Cao, David Rigby, Tim Bruckner, Joan Casey, Allison Stolte, Hedwig Lee,

Black-white disparities in infant health remain stark in the United States. Black-white disparities in state-level incarceration rates correlate with the racial inequity in infant health. However, less is known about whether other aspects of the criminal legal system, such as parole and probation, affect racial disparities in these outcomes. Here we examine the association between state-level rates of imprisonment, parole supervision, and probation supervision on Black-white differences in infant mortality – both total rates and race-specific rates. We use two-way fixed effects models with state and year fixed effects to estimate the impact of these state-level characteristics on Black, white, and Black-white differences in infant mortality rates. Our results show positive associations between total imprisonment rates and Black infant mortality and Black-white inequality in infant mortality. Controlling for race-specific imprisonment rates, race-specific rates of parole and probation are associated with decreases in the infant mortality rate for Black infants, but not for white infants. Race-specific probation and imprisonment rates have a significant interactive effect on white infant mortality, where increased levels of both lead to higher rates of white infant mortality. This research has implications for how we think about parole and probation as opposed to imprisonment on a societal level.

## Non-health institutions (business, political, education systems)

Exploring the Relationship Between Self-Employment and Cardiovascular Disease Risk Factors Among Asian American Women Serinee Tran\* Serinee Tran, Carlos Oronce, Kimberly Narain,

**Background:** Asian populations have lower rates of obesity based on standard body mass index (BMI) thresholds but higher rates of obesity-related diseases. Self-employment has been negatively linked with obesity and cardiovascular disease (CVD) risk factors among women across different racial and ethnic groups. However, no studies have examined this relationship among Asian women. This study aims to explore the relationship between self-employment and CVD risk factors among Asian women.

**Methods:** Linear regression models and Behavioral Risk Factor Surveillance System (1993–2022) data were used to conduct weighted cross-sectional analyses exploring the relationship between self-employment and CVD risk factors (obesity, diabetes, hypertension, binge drinking, smoking, and exercise) among working Asian women aged 20–65. An indicator variable was coded as "1" for women who were self-employed and "0" for women who worked for salary or wages. Obesity was classified using standard BMI (≥30 kg/m²) and Asian-specific BMI (≥27.5 kg/m²) thresholds. Models were adjusted for demographics, socioeconomic status, family structure, and insurance, as well as state and year fixed effects.

**Results:** Self-employment was negatively associated with obesity with a statistically significant (p < 0.05) decline of 4.9 and 6.8 percentage points in the probability of obesity using standard and Asian-specific BMI thresholds, respectively. Self-employment was also associated with a 4-percentage-point decline in the probability of reporting binge drinking. None of the other outcome measures had a statistically significant relationship with self-employment.

**Conclusions:** This study suggests that self-employment is negatively associated with obesity and binge drinking, important risk factors for CVD. Furthermore, the relationship between self-employment and obesity is underestimated by nearly 30% using standard BMI thresholds. Future studies should explore the mechanism underlying these relationships.

## Non-health institutions (business, political, education systems)

The Spatial Distribution of School Environment Indicators in New York State and Co-Patterning with Sociodemographic Characteristics Lisa Frueh\* Lisa Frueh, Ellen Kinnee, Perry Sheffield, Jane Clougherty,

Children aged 5-18 in the United States spend around 20% of their time in school, and school context is a key determinant of child health. We compiled publicly-available data on public school educational, social, and building environment in New York State (NYS), to investigate spatial clustering across these domains, and co-patterning with neighborhood sociodemographic characteristics. A suite of school educational, social, and physical indicators were compiled for public schools across 2005-2019 in NYS. Spatial regression models were used to estimate bivariate spatial associations between census tract-level sociodemographic characteristics and school quality indicators.

Results suggest that schools with better educational and physical environments are more often found in census tracts with larger non-Hispanic White populations and higher socioeconomic position. For example, in preliminary non-spatial regression models in 2015, a 1-percent increase in census tract population of color was associated with 3% lower odds that > 90% classes in the school are taught by a highly-qualified teacher [OR = 0.97 (95%CI: 0.96, 0.97)]. Similarly, a 1-percent increase in the rent-burdened population (spending > 30% of income on rent) was associated with 2% lower odds that > 90% classes in the school are taught by a highly-qualified teacher [OR = 0.98 (0.97, 0.99)]. Building quality indicators showed comparable patterns—for example, higher rent burdened population was associated with higher odds of receiving negative ratings for space adequacy, ventilation, or overall building rating, and higher odds of evidence of vermin.

Schools with poorer building quality, more crowding, and lower teacher qualifications are more likely to be found in census tracts of lower socioeconomic position and a greater proportion of people of color. These results highlight racial, ethnic, and socioeconomic disparities in access to high-quality public schools in NYS.

## **Place/Communities**

State-Level Cervical Cancer Incidence Changes in the United States, 2001-2021 Ryan Suk\* Ryan Suk, Yenan Zhu, Xiangren Wang,

**Background:** Evidence suggests that the previously declining US cervical cancer incidence plateaued in the past decade, coinciding with decreased screening uptake. However, state-level variations in cervical cancer incidence temporal changes remain unclear.

**Methods:** The 2001-2021 National Program of Cancer Registries (NPCR) and Surveillance, Epidemiology, and End Results (SEER) dataset was used. We included cases that met the inclusion criteria of microscopically confirmed adenocarcinomas and squamous cell carcinomas of the cervix, diagnosed in female individuals aged 20 years or older. Incidence rate ratios (IRRs) comparing incidence rates in 2001-2005 with those in 2017-2021 were calculated, stratified by diagnosis age group and race and ethnicity, and age-adjusted to the 2000 US standard population.

**Results:** Overall, cervical cancer incidence significantly declined (IRR = 0.88; 95% confidence interval [CI] = 0.87-0.89). However, we observed state-level variations; 24 states experienced statistically significant decreases, 22 states had non-significant decreases, and 5 states had non-significant increases. Remarkably, Oklahoma exhibited a significant increase in the 30-44 years (IRR = 1.17; 95% CI = 1.01-1.37) and 45-64 years (IRR = 1.21; 95% CI = 1.03-1.41) age groups. Kansas (30-44 years: IRR = 1.26; 95% CI = 1.04-1.53), Indiana (45-64 years: IRR = 1.22; 95% CI = 1.06-1.40), and Wyoming (45-64 years: IRR = 1.96; 95% CI = 1.18-3.32) also showed significant increases in some age groups. Among non-Hispanic White (NHW) individuals, Mississippi had a significantly increased rate (IRR = 1.22; 95% CI = 1.02-1.45), while 13 other states showed non-significant increases, including Louisiana, where both NHW and Hispanic individuals exhibited non-significant increases.

**Discussion:** Greater efforts are needed in states where cervical cancer incidence remains stable or is increasing, focusing on tailored interventions to enhance screening uptake and HPV vaccination.

# Place/Communities

# A participatory systems approach to understanding the health effects of neighborhood development in Durham, NC Aine O'Connor\* Aine O'Connor, Natalicio Serrano,

Physical inactivity is associated with excess chronic disease risk and mortality. In the US, Latine and Black communities report higher rates of inactivity and chronic disease compared to white communities. Neighborhood environment can influence physical activity behavior, but Latine and Black neighborhoods often feature fewer, lower-quality physical activity resources than white communities. Neighborhood development may alleviate these disparities by investment in infrastructure, facilitating active transportation and leisure-time exercise. However, development in these communities may also produce negative outcomes for Latine and Black residents through gentrification and/or displacement.

This study aims to characterize the systemic and multilevel factors driving racial and ethnic disparities in neighborhood development and physical activity in Durham, NC, where recent surges in development are escalating changes to resident communities.

Our project uses a community-based system dynamics approach to identify factors influencing the relationship between neighborhood development investment and physical activity in Black and Latine neighborhoods in Durham. Working with a Community Advisory Board of local experts, advocates, and community members, we are recruiting 20-30 participants representing community, research, and policy/practice perspectives to engage in participatory group model building (GMB) workshops in late spring 2025.

Resulting systems maps will depict factors, causal pathways, and feedback loops identifying complex, interacting relationships between neighborhood investment, property values, transit, housing, neighborhood composition, displacement, and physical activity. In rapidly changing urban contexts, participatory modeling identifies locally relevant areas of leverage for advocacy and policy to benefit community health and anti-displacement.

# Place/Communities

From informing to co-governance: Building a community engagement model to evaluate a multi-sector health initiative Jackie Jacobs\* Anna Forte, Jenny Holcomb, Jackie Jacobs,

Community engaged research and evaluation exist along a spectrum of engagement, ranging from informing the community to deferring to the community. Community engagement is critical in designing comprehensive research protocols and evaluation plans for community health initiatives. By involving community members, data collection, analysis, interpretation and dissemination are more likely to be culturally and linguistically appropriate. Yet, evaluators and researchers often lack preparation or adequate resources to engage with community members effectively.

This presentation explores the implementation of a community engagement model in an evaluation of a collective impact initiative. The Health First Collaborative (HFC) was created in the Spring of 2020 to help address root causes of racial inequities and improve the wellbeing of Chicagoland residents. The HFC funded two hubs of health transformation: (1) care delivery innovation projects at community health centers and (2) COVID-19 vaccine outreach led by community-based organizations.

A Community Advisory Council (CAC) was built for community residents to share their lived experiences and inform implementation and evaluation efforts. The CAC comprised 17 residents of Chicagoland communities experiencing the highest rates of COVID-19 mortality. Members advised on the evaluation (planning, data collection and analysis, and dissemination of findings), participated in the creation of a co-governance model for future grantmaking, and offered feedback to HFC grantees.

This presentation will discuss CAC activities and their alignment with the spectrum of community engagement. We will describe challenges and lessons learned, evaluation and quality improvement of the community engagement model, and ongoing community engagement efforts. This sustained community engagement ensures those most affected by the initiative shape evaluation design, enhance credibility of findings, and ultimately, advance equity.

## **Place/Communities**

"It was mentally draining, the worst feeling in the world": Pandemic Eviction Risk & Wellbeing Kyra Rost\* Kyra Rost, Danya Keene, Penelope Schlesinger,,

The ongoing affordable housing crisis in the United States has been exacerbated by the COVID-19 pandemic, deepening instability for millions of Americans. Housing is fundamental to overall wellbeing, providing security, stability, and the foundation for employment, education, and health (Swope & Hernández, 2019). The pandemic caused widespread job loss, financial instability, and health crises, leaving millions at risk of eviction. By August 2020, approximately 2.4 million households expressed uncertainty about their ability to pay rent, rising to 3.5 million for households with children (U.S. Census Bureau, 2020). Individuals in under-resourced neighborhoods were already at heightened risk of eviction due to systemic disadvantages and racial disparities. Extended exposure to housing instability deteriorates both physical and mental health (Forde, 2019). contributing to increased hospital visits (Collinson et al., 2022) and poorer self-rated health (Hatch & Yun, 2020). These effects are especially pronounced among Black individuals, immigrants, and women (Melton-Fant et al., 2022; Graetz et al., 2023). Single mothers and their children are particularly vulnerable, facing heightened eviction rates and adverse health outcomes (Desmond & Kimbro, 2015). Few qualitative studies have explored individual-level health effects of eviction risk during the pandemic, and even fewer examine mothers' and caregivers' perspectives on their children's experiences.

This study analyzed 57 in-depth interviews with individuals experiencing eviction risk in Bridgeport, CT, and Columbus, OH. Participants were recruited through community partners and public postings, all 18 or older and struggling to pay rent since March 2020. The sample was predominantly Black (56%), followed by White (28%), Hispanic (23%), and multiracial/other (14%). Women comprised 79% of participants. Semi-structured interviews, conducted between May and October 2023, explored housing conditions, eviction moratoriums, emergency rental assistance, landlord interactions, and physical and mental well-being. Interviews were recorded, transcribed, and analyzed using NVivo software, following an inductive thematic analysis approach informed by grounded theory.

Preliminary results reveal three primary themes: stress-induced health conditions, worsening mental health, and the impact of eviction risk on children. Participants described rapid weight loss, sleep disturbances, and stress-related health issues. Mental health conditions such as depression, bipolar disorder, and suicidal ideation were exacerbated by eviction risk. Parents reported behavioral and emotional changes in their children, including anxiety, ADHD symptoms, and fears of homelessness, demonstrating that eviction risk significantly disrupts family well-being...

## **Place/Communities**

Evaluating a Hypertension Screening Event Conducted by a Health System in Partnership with a Hispanic Community Organization in Luzerne County, PA Adwait Chafale\* Thomas Morland, Deborah Mills, Thomas Morland, Rossanna Gabriel, Kathryn Hall, Michael Kovalick, Dona Tenedios, George Ruiz, H. Lester Kirchner, Annemarie Hirsch,

**Background:** Hypertension affects nearly half of U.S. adults, costing an estimated \$131 billion annually. Hispanic populations have similar prevalence to the general population but lower control. Targeted interventions leveraging community partnerships could mitigate this problem.

**Objective:** This study evaluated a hypertension screening event in Luzerne County, PA tied to a monthly community dinner, aiming to increase hypertension awareness, identify uncontrolled hypertension, address social determinants of health, and link patients to a federally-qualified health center look-alike (FOHC).

**Methods:** A hypertension screening event was conducted at the community dinner, with patients offered education and FQHC appointments. Staffing included 22 FQHC employees, 7 community organization members, and the research team. The event was advertised on local Spanish-language radio and publications. The menu included low-sodium options, developed in consultation with the FQHC dietician. Bilingual screening and materials were available. A mixed-methods evaluation was conducted using the RE-AIM framework. Quantitative measures included demographics, blood pressure, primary care status, and scheduling status with the FQHC. Qualitative interviews were conducted.

**Results:** Among 145 individuals screened, 140 completed the survey. 72 participants (51%) reported age >50, 102 (73%) reported female sex, 54 (39%) did not have primary care, 58 (41%) had diagnoses of hypertension at baseline. 59 participants (42%) had blood pressure in the hypertensive range, including 24 (17%) who had never been diagnosed with hypertension. 26 individuals scheduled with the FQHC. Surveys showed high acceptability, though participants requested more interpreters and expanded screenings (e.g., diabetes).

**Conclusion:** The event engaged the Hispanic community, identified undiagnosed hypertension, and connected participants to care. Similar efforts could advance chronic disease management in underserved populations.

### **Place/Communities**

Ranking Communities of Mississippi for Health Burdens: A Census Tract-Based Perspective of Social Determinants of Health Tasnim Tabassum\* Tasnim Tabassum, Salit Chakma, Benjamin Walker, Fazlay Faruque,

Community assessment of health disparities requires examination of social determinants of health (SDOH) at granular levels to inform effective policy interventions. The National Institute of Health (NIH) has Community Partnerships to Advance Science for Society (ComPASS) programs to investigate the root causes of health problems and chronic diseases in American communities. They suggest a list of SDOHs that are essential for analyzing health burdens and disparities. Our study investigated 20 indicators across the NIH's 14 SDOH domains within Mississippi's 878 census tracts. Based on these indicators, we established simple composite scores for all the census tracts of Mississippi. Our two-stage methodology involved statistical and spatial analysis. First, we used secondary data from the U.S. Census Bureau's American Community Survey (ACS) five-year estimates. Data processing is conducted in STATA 17, which includes cleaning, standardization, composite score calculation, and demographic analysis. Census tracts were classified into quartilebased performance groups, and scores were summed to rank tracts from best to worst performing. In the second stage, spatial analysis using ArcGIS Pro explored health disparities. Findings revealed that Mississippi Delta along with other census tracts had the worst SDOH conditions. Their socioeconomic status, housing characteristics, living arrangements, lack of resources, transportation, etc. are increasing the burden. The spatial analysis enables us to observe the pattern and connect with demographic properties. The elderly females living alone had a 7% higher likelihood of residing in the most vulnerable tracts. We conducted a regression analysis to find the association between cardiovascular disease health outcomes and established census tract performance to identify where policy-level focus should be implemented for reduced health disparities.

**Policy** 

Asset Limits Continue To Restrict Medicaid Eligibility For Older Adults And People With Disabilities Catherine Ettman\* Andrew Anderson, Catherine Ettman,

**Research Objective**: The Affordable Care Act and Medicaid expansion created new income-based eligibility pathways that lifted asset limits for some populations. However, individuals who qualify for Medicaid under the aged, blind, and disabled pathway remain subject to both income and asset tests. This bifurcated eligibility structure results in some income-eligible older adults and individuals with disabilities being excluded from Medicaid solely due to asset tests that are no longer applied to other groups.

**Study Design**: First, we documented income and asset limits across states using 2024 state-specific Medicaid eligibility websites and Medicaid planning assistance resource guides. Second, we used the 2023 American Community Survey and corroborated with previously published data to state-specific estimates of the aged, blind, and disabled population. We defined actual and potential Medicaid eligibility using state-specific income thresholds and assessed the number of individuals excluded solely due to asset tests.

**Principal Findings**: First, we identified variation in financial asset limits for Medicaid eligibility across states. The majority of states had asset limits at the federal guidance of \$2,000. Connecticut had a lower asset limit (\$1,600), and seven states (Illinois, Maine, Maryland, Minnesota, New York, Oklahoma, Rhode Island) had higher limits, ranging from \$2,500 in Maryland to \$31,175 in New York

For housing, 41 states used the federal home equity limit of \$713,000. Idaho, Maine, and Wisconsin set home equity limits at \$750,000, and six states (District of Columbia, Washington, New York, New Jersey, Hawaii, Massachusetts) applied the maximum allowable limit of \$1,071,000. California eliminated asset limits for Medicaid eligibility in January 2024—the only state to do so.

We estimate that 18,164,352 older, blind, and disabled Americans were potentially subject to asset limits under 2024 Medicaid eligibility thresholds. Among those adults, 8,598,582 may have met income criteria but were excluded from Medicaid eligibility solely due to asset tests.

**Implications for Policy or Practice**: Asset limits may create a disincentive to save and reduce financial stability among vulnerable populations. Estimating the number of income-eligible individuals excluded due to asset tests allows policymakers to assess the potential coverage gains and administrative simplification from reform. Asset limits may be a policy lever to adjust in efforts to improve access to care, reduce administrative burden for states and enrollees, and improve population health.

**Policy** 

The effect of increased schooling on the risk of intimate partner violence among rural Filipino women: Quasi-experimental evidence from an educational policy reform Elijah Watson\* Elijah Watson,

The expansion of women's education is hypothesized to reduce intimate partner violence (IPV), but whether observed associations reflect causal effects or unobserved confounding remains debated. Similar studies leveraging exogenous variation from educational reforms have found support for causal reductions in IPV in Peru and Uganda but not in Malawi. To my knowledge, no comparable quasi-experimental evidence exists for Southeast Asia. In 1988, the Philippines passed the Free Public Secondary Education Act, eliminating tuition fees for public secondary schools. This study leverages the reform to estimate its impact on IPV risk among Filipino women. Using data from the 2013 and 2017 Demographic and Health Surveys, when respondents were ages 35-45, I compare women born in 1976-1979 who entered secondary school post-reform to those born just before in 1972-1975. Analyses were stratified by rural versus urban birthplace and adjusted for ethnolinguistic group, religion, and survey year. Approximately 13% of women in both rural and urban samples reported ever experiencing IPV. Reform exposure was strongly predictive of increased years of schooling for rural-born women (B = 0.81, p < 0.001, N = 3,202) but not for urban-born women (B = 0.18, p = 0.14, N = 1,712). For rural-born women only, I use reform exposure as an instrumental variable to estimate the causal effect of schooling on IPV. Two-stage least squares (2SLS) estimates indicate that an additional year of schooling for rural-born women reduced the risk of ever experiencing IPV by 4% (95% CI: -0.07, -0.01). An analysis of mechanisms suggests that increased schooling for rural-born women lowered the risk of teen cohabitation and increased the likelihood of selecting a more-educated spouse. These findings provide novel quasiexperimental evidence from Southeast Asia that expanding access to education reduces IPV risk for rural Filipino women, in part by delaying union formation and influencing partner selection.

**Policy** 

Characterizing health journal policies' for communicating race, ethnicity, sex, and gender Michael Esposito\* Rae Anne Martinez, Michael Esposito, Nafeesa Andrabi, Noah Haber, Lillian Norman, Kene Orakwue, Natalie Smith, Shengyeng Vang,

Recent research has illuminated the lack of rigor regarding the use of social determinants in the health sciences. To address this deficit, a growing number of health journals have adopted policies with explicit instructions for communicating race, ethnicity, sex, and gender since 2021. However, the prevalence of these policies as well as their content and scope remain unexamined. We aim to systematically review and characterize journal editorial policies related to race, ethnicity, sex, and gender in three disciplines - Clinical Medicine, Epidemiology, and Public Health. We used Clarivate Analytics 2023 Journal Citation Reports to identify health journals by disciplinary classification from the Science Citation Index Expanded. Two independent samples were taken: (1) a random sample of 30% of all English language journals stratified by discipline (n=137) to provide insights into broader disciplinary-specific trends; (2) a non-random sample of 5-6 field-leading journals to provide insight into specific disciplinary leaders (n=16). Journals' publicly available websites and manuscript submission portals were reviewed; all information was entered into a standardized REDCap form. For comparison, we also reviewed AI, casual inference, and EQUATOR Network policies. Sample 1 data collection is underway; results are expected prior to conference. In sample 2, 60% of top Clinical Medicine and Public Health journals have race and ethnicity policies, while top Epidemiology journals have none. In all disciplines, at least 40% of top journals have sex and gender policies. The prevalence of AI and EQUATOR policies is higher than that of the race, ethnicity, sex, and gender policies in all disciplines. Content analysis will be conducted to further interrogate both samples' policies. Journal editorial policies may be key structural levelers to shift disciplinary practices surrounding social determinants, but their adoption may lag behind other policy types and vary by discipline.

# **Population Health**

Burning Up & Burning Out: How Campus Heat Impacts College Students' Quality of Life Sally Nguyen\* Sally Nguyen, Adrienne Nguyen, Mia Lukenbill, Ryan Lester,

Rising temperatures due to climate change pose significant challenges to health and quality of life (QoL), particularly in urban environments. To examine how extreme heat uniquely affects college students, the IAPHS Student Chapter\* at the University of Houston (UH) conducted a multi-phase study to examine how elevated campus temperatures impact UH students' QoL. Our findings offer actionable, evidence-based, student-centered policy recommendations for UH administrators, in order to develop a more sustainable, health-supporting campus that improves QoL for all.

Phase I of this study included a narrative literature review to identify key themes and gaps in understanding related to climate and QoL. Findings were then used to inform semi-structured interviews with a purposive sample of UH students, ensuring diversity in backgrounds and experiences (i.e., commuters vs. on-campus residents and upperclassmen vs. first-year students). Insights from interviews then guided the development of a structured survey, which validated the qualitative insights on a broader scale.

In Phase II, combined insights from Phase I were used to conduct a Photovoice study, where a small sample of UH students were tasked to document their experiences with urban heat through photography. These student-generated images served as a foundation for facilitated discussions, empowering students to share their perspectives, articulate challenges, and propose solutions.

This poster will showcase findings from all study phases. Through these findings, we strive to foster a more heat-resilient and health-supporting campus environment in the face of climate change—not only for UH, but also for universities across the country, setting a precedent for climate-conscious, sustainable campus designs that protect student well-being.

Race/Ethnicity

# Crossing Lines with Unbalanced Ties: Power Asymmetry in Friendship and Racial Minority Adolescents' Mental Health Fei Xie\* Fei Xie,

The impact of social relationships and networks on health is a double-edged sword, yet research has focused primarily on their beneficial aspects while overlooking potential negative effects (Song et al., 2021; Umberson & Karas Montez, 2010). Friends provide social support, knowledge, and a sense of belonging, positively affecting well-being (Greco et al., 2015; Ueno, 2005). However, low-power positions in friendships may negatively impact mental health (Dickerson, 2008; Marmot, 2005). Individuals with lower social power may experience higher stress, less autonomy, and greater threat from social evaluation. Schacter et al. (2023) found that individuals perceiving friends as dominant report lower self-esteem and more depression and anxiety.

Drawing on Status Characteristics Theory (Berger et al., 1977), race can shape power in social interactions. Racial minority adolescents, already disadvantaged in social contexts, may be more affected by power asymmetry, threatening their sense of autonomy and self-control. While interracial friendships can theoretically bridge power differences, higher-status friends may not share resources equally, and such friendships often serve symbolic purposes rather than providing mobilizable social capital (Putnam, 2001; Jackman & Crane, 1986). Research also suggests interracial friendships may have lower intimacy, fewer shared activities, and reduced reciprocity compared to same-race friendships (Kao et al., 2019; Tropp & Prenovost, 2008).

This study examines three questions: (1) whether power asymmetry in friendship networks influences adolescent mental health; (2) if racial minority adolescents are more vulnerable due to racial power status; and (3) whether power differences in cross-racial friendships trigger negative mental health outcomes. Data from the National Longitudinal Study of Adolescent to Adult Health (Add Health, Wave 1) are used. Power differences are measured as the difference in friend nominations received (in-degree). Mental health is assessed with the CES-D scale (0-57), logarithmically transformed for analysis. Preliminary findings indicate that power asymmetry affects depression scores, with racial minorities more sensitive to negative effects. Future analyses will examine multi-level school effects and network formation using ERGMs...

Race/Ethnicity

The Combined Influence of Gender and Religion: A Mixed Methods Study of Discrimination, Ethnic Identity, and Mental Health Among Arab Americans Molly Green\* Molly Green,

Arab Americans, a small but growing minority group in the US, experience high levels of discrimination and resulting poor mental health outcomes comparable to other ethnic minority groups. For Arab Americans living in the ethnic enclave community in SE Michigan, elements in the community can be protective against poor mental health associated with discrimination. However, it is unclear the ways in which these elements may influence mental health outcomes associated with discrimination. In the initial analysis of the qualitative and qualitative data in this explanatory sequential study, we found a protective effect of ethnic identity on the relationship between discrimination and mental health outcomes, especially for Arab American women. We also found that second generation Arab Americans integrate aspects of both Arab and American cultures and push back against discrimination. Through a joint analysis of these quantitative and qualitative data, we identified and explored elements of the ethnic enclave, including religion and gender roles, which relate to a sense of ethnic identity and discrimination and influence mental health of residents. Our mixed methods results showed how religion and gender have a combined influence on experiences of discrimination. Gender roles explain some difference in the effects of ethnic identity on mental health outcomes and access to protective resources in the community. Visible religious identifiers, particularly among Muslim women, may cause both more frequent discrimination and increased worry about these experiences, possibly causing adverse mental health outcomes. Stigma around mental health, however, prevents many people in the community from seeking care and addressing trauma.

Race/Ethnicity

Racialized Legal Status: An Intersectional Framework for Understanding Mental Health in Latino Communities Lianeris Estremera-Rodriguez\* Lianeris Estremera-Rodriguez, Lorraine Dean,

Racialized legal status (RLS) is the intersection of an individual's legal status, race and ethnicity, reflecting a social position created by immigration laws that appear neutral but, in practice, marginalize and socially exclude people who are Black or Brown and have discredited legal status (i.e., undocumented). The current sociopolitical climate calls for intersectional approaches to understand how the enforcement of these race-neutral policies disproportionately target specific groups, affecting their health. RLS laws establish a social hierarchy in which individuals with a discredited legal status, compared to U.S. citizens or naturalized individuals, are the most excluded. They may also face exclusion based on their ethnicity. Latino individuals face higher levels of exclusion compared to Non-Hispanic White individuals. Legal and social exclusion factors create a dual exclusion that directly impacts the mental health of individuals with a discredited legal status and indirectly affects the mental health of their family members, regardless of their own legal status. There are no current frameworks for empirically assessing the mental health impacts of RLS in Latinos.

Latinos with discredited legal status are more likely to suffer from mental illness. We need a framework that explains Latino mental health disparities beyond behavioral or cultural factors to develop later measures that capture social stratification within the context of 21st-century immigration. We create a framework to conceptualize exclusion due to RLS as a multidimensional process and understand how different multiple exclusion indicators affect Latinos' mental health. Our framework is based on a comprehensive review of literature and current policies. It will be presented in a schematic diagram and will provide applied examples using large real-world datasets in the U.S. This framework can guide the development of new measures to assess disparities and inform policies to address them.

# Reproductive health

# Study Proposal: Sexual Health Knowledge, Attitudes, and Experiences of Lebanese Canadian Muslim women Roa Sabra\* Roa Sabra,

Culture, religion, social upbringing, personal values, and beliefs all significantly impact an individual's sexual health knowledge, attitudes, and experiences. In a country like Canada, which prides itself on multiculturalism and diversity, healthcare providers must understand these various factors to effectively deliver care to ethnically and religiously diverse minority groups. One of these groups is the Lebanese Canadian Muslim community. Those with a Lebanese and Muslim background may carry different experiences around sexual health due to the cultural and religious emphasis on premarital chastity, especially for women.

This study aims to explore the sexual health knowledge, attitudes, and experiences of second generation Lebanese Canadian Muslim women. This population group allow us to observe the unique experience between the culture and religious values one is raised with at home versus the cultural and societal values they are experiencing outside of the home, e.g. Western society. The primary objectives of the study are: 1) Assess second generation Lebanese Canadian Muslim women's knowledge, attitudes, and experiences with sexual health; 2) Explore cultural and religious influences on the sexual lives of second generation Lebanese Canadian Muslim women; and 3) Provide and identify recommendations for improving access to sexual health information and services for second generation Lebanese Canadian Muslim women living in Canada.

To meet these objectives, this study employs a multi-methods approach that consists of 5 components: a scoping review, a cross-sectional survey, focus group discussions, in-depth interviews, and key informant interviews. Given that many Lebanese Canadians reside in Ontario and Quebec, I will recruit participants from Ottawa-Gatineau, Montreal, and Windsor. In gaining insight on the role(s) that culture and religion plays on the sexual health knowledge, attitudes, and experiences of Lebanese Canadian Muslim women, we aim to identify facilitators and barriers to accessing sexual health services and information, thereby developing recommendations to improve the delivery of sexual healthcare.

# Reproductive health

Paradox or Disparity? Black/White Differences in Neonatal Survival among Periviable Births, 1995 to 2019 Tim Bruckner\* Tim Bruckner, Allison Stolte, Ralph Catalano, Alison Gemmill, Brenda Bustos.

**Background:** Infants born in the periviable period (i.e., 20 0/7 weeks, to 25 6/7 weeks of gestation) account for fewer than 1% of births in the US but over half of all neonatal deaths. At each gestational age (GA) during the periviable period, Non-Hispanic (NH) Black infants show lower risk of neonatal death than do NH white infants. Scholars refer to this GA-specific NH Black survival advantage as paradoxical because it conflicts with the broader observation of large, persistent, and robust Black/white disparities in perinatal outcomes. The last three decades, however, have witnessed substantial improvements in neonatal survival among periviable births, calling into question whether the survival advantage still exists.

**Methods:** We retrieved 1995-2019 US data and focused on NH Black (N=149,519) and NH white (N=158,468) births that occurred during the periviable period (20-<26 completed weeks gestation). Logistic regression models include main effects on race-ethnicity and 5-year period and their interaction, as well as a set of individual maternal and birth covariates).

**Results:** The Black survival advantage persists across the entire study period, although the advantage shrinks in both absolute and relative terms over time. The risk of neonatal death among NH white periviable births from 1995-1999 to the 2015-2019 epoch (i.e., 53% to 43%, or a 19 percentage point decline), fell more precipitously than for NH Black periviable births (i.e., 46% to 40%, or a 13 percentage point decline; p<.001).

**Conclusions:** Despite prior literature documenting dramatic reductions in care disparities—which might suggest faster improvements in survivability among NH Black periviable infants and a growing survival advantage—we show pronounced improvements in neonatal survival that appear much faster for NH white (v. NH Black) periviable infants over time. Possible explanations, which deserve careful scrutiny, include inequitable access to medical advancements in more recent epochs.

# Reproductive health

Racial disparities in birth outcomes by planned place of birth in Louisiana (2012-2023) Dovile VILDA\* Dovile Vilda, Inngide Osirus,

**BACKGROUND:** Planned out-of-hospital births are associated with fewer medical interventions, yet little is known about variations across racial groups. Our objective was to compare birth outcomes among planned in-hospital and out-of-hospital births (or community births, i.e., occurring at home or free-standing birth centers) in Louisiana, overall and among non-Hispanic (NH) Black and White individuals.

**METHODS:** We conducted a retrospective cohort study of all full-term, singleton live births in Louisiana from 2012–2023 (N=731,335). Outcomes included labor induction, spontaneous labor, Cesarean delivery, NICU admission, and low birthweight. We estimated risk ratios (RRs) comparing these outcomes by planned place of birth (planned in-hospital and out-of-hospital births) using modified Poisson regression and adjusting for sociodemographic characteristics, pre-existing health conditions, and other risk factors.

**RESULTS:** Among 626,909 births, 99.7% were planned in-hospital and 0.3% out-of-hospital births. In fully adjusted analyses, planned in-hospital births had higher risks of labor induction (aRR = 16.20, 95% CI 11.18-23.46) and Cesarean delivery (aRR = 20.04, 95% CI 13.06-30.74) compared to planned out-of-hospital births. Black birthing individuals had the highest relative risk of Cesarean delivery in in-hospital births compared to out-of-hospital births (aRR = 27.43, 95% CI 10.29-73.09), exceeding that of White birthing individuals (aRR = 18.14, 95% CI 10.93-30.10). Additionally, spontaneous labor showed opposite trends: planned in-hospital births were associated with higher rates of spontaneous labor for White individuals (aRR = 1.43, 95% CI 1.19-1.72) but lower rates for Black individuals (aRR = 0.69, 95% CI 0.57-0.83). These patterns remained when the analysis was restricted to nulliparous pregnancies.

**CONCLUSION:** Our findings highlight racial disparities in birth outcomes by planned birth settings, suggesting potential differences in labor management and intervention practices by race.

# Reproductive health

Understanding the Impact of Lack of Access to Sexual and Reproductive Health Services Among Nigerian Women Through a Theoretical Perspective Rejoice Obiora\* Rejoice Obiora,

Access to sexual and reproductive health services (SRH) for women of reproductive age in sub-Saharan Africa is a protective factor against unplanned pregnancies and unsafe abortion. In sub-Saharan Africa, the prevalence of contraceptive use which is a major component of SRH services is currently 13% which is relatively very low when compared with figures from developed countries . The lack of access to SRH services in marginalized and patriarchal communities in Nigeria predisposes women to different negative experiences given the high rates of gender-based violence occurring in those communities .

Although studies have shown that access to sexual and reproductive health services is associated with positive health outcomes among women of reproductive age , there is an increasing constraint in accessing these services in Nigeria. These constraints are because of several factors such as gender and social norms, cultural factors, structural or institution factors, religion, and the perceptions around contraceptive use in Nigeria .

Gender roles and societal expectations frequently strip women of autonomy over decisions regarding contraceptive use. Women are often viewed primarily as "child bearers," with children regarded as "gifts from God." Misconceptions, including the belief that contraceptives cause sterility or infertility, persist even among educated women in Nigeria.

The objective of this study is to use theories such as the life course theory and weathering framework to understand the impact of lack of access to sexual and reproductive health services among women in Nigeria. These theoretical lenses were used to explore how experiences such as unplanned or unwanted pregnancies and unsafe abortions accumulate over time, leading to adverse health outcomes. This study also highlights the systemic and structural barriers faced by Nigerian women and underscores the need for a nuanced framework to address the interlocking factors shaping their reproductive health trajectories.

# Reproductive health

Risky sex: cultural factors that put women at risk of unintended pregnancy in Kakamega county, Kenya Nema Aluku\* Nema Aluku,

**Background: Women** of reproductive age in Kakamega county continue to grapple with the rising prevalence of unintended pregnancies resulting in abortions and unwanted children. There exists a gap of data on how cultural beliefs and practices continue to leave women at risk of unintended pregnancy. This study aims to elucidate cultural factors that put women at risk of unintended pregnancy in Kakamega county, Kenya.

**Methods:** This was part of a larger mixed methods study that collected survey data (n=810) women of reproductive age and conducted key informant interviews (n=16), Focus Group Discussions (n=4), selected from among clan elders; reproductive health officers; religious leaders; and health workers. The study was carried out in 2016, covering fifty-four (54) villages under the twelve (12) subcounties in Kakamega. Summary statistics were generated using frequency and contingency tables. In order to highlight participants lived experiences their views were summarised verbatim under the research questions and emerging themes.

**Results:** The study revealed that a woman who is married polygamous is 2.727 times more likely to get unintended pregnancy as compared to other marital status. The most (29.2%) stated cultural practice that puts women at risk of unintended pregnancy was funeral discos or "disco Matanga"; wife/widow inheritance (24.8%); acceptability of multiple sexual partners (24%); widow cleansing (12%) – practicing widow cleansing is 3.153 times more likely to expose a woman to the risk of unintended pregnancy – and initiation ceremonies (9.1%); others (0.9%). Study participants indicated that clan elders supported and encouraged these cultural practices. Participants suggested abolishing these cultural practices through community dialogue sessions. Additionally, women of reproductive age should be given an opportunity to highlight key cultural practices that influence unintended pregnancy.

**Conclusion**: The study provided new knowledge on how culture can influence women's sexual and reproductive health. Community dialogue sessions and existing structures should be used to disseminate key messages.

# **Social/relational factors**

Past-year victimization, the victim-perpetrator relationship, help-seeking, and mental health outcomes among Latines: A moderated-moderation analysis Francesca Korte\* Francesca Korte, Carlos Cuevas, Carmel Salhi, Alisa Lincoln,

Hostility and intolerance toward the Latine community are not new phenomena in the United States (US), but these sentiments have increased in recent years. A growing literature has linked anti-Latine and anti-immigrant rhetoric and policies to greater victimization risk and poorer mental health in this population. However, little is known about how these factors shape, and are shaped by, Latine norms and scripts, including if and why Latines seek help following a victimization experience. Drawing from epidemiological and sociological theories, this moderated-moderation analysis examines the links between victimization experiences, the victim-perpetrator relationship, help-seeking, and mental health outcomes among US Latines. Data come from the Longitudinal Examination of Victimization of Latinos (LEVEL), designed to understand patterns of bias- or hatemotivated victimization and trauma among Latines (N = 323) living in San Diego, CA, Houston/Galveston, TX, and Boston, MA. We consider two conditional effects—help-seeking (yes/no) and the victim-perpetrator relationship (perpetrator was family vs. was not family)—on the relationship between past-year victimization experiences and mental health outcomes. We anticipate several important findings. First, individuals who experienced victimization will have worse mental health than those who did not. Second, individuals who sought help will have better mental health than those who did not. Finally, individuals who sought help and were not victimized by a family member will have better mental health than those who did not seek help and were victimized by a family member. This analysis is grounded in the premise that constraints on the choice to identify, disclose, and seek help for victimization experiences exist on a spectrum. By considering victimization type and the victim-perpetrator relationship, this work will both deepen our understanding of help-seeking behaviors and also add important nuance to patterns of mental health outcomes among Latines who have experienced victimization. Furthermore, conceptualizing these phenomena as occurring within the context of anti-Latine and anti-immigrant US social context will illuminate how rhetoric and policies of exclusion can impact Latines' risk of experiencing victimization, and the extent to which they exercise their personal agency and opportunities to engage in help-seeking.

# Social/relational factors

Out of the mouths of babes: changing policy and practice around normative acts of violence in childrens' lives in LMICs Susan Elliott\* Susan Elliott, Tobias Hecker, Karen Devries, Katharina Gobmann.

The experience of violence in childhood is not only a global human rights issue, but a global issue of health and wellbeing. Furthermore, in this year of the 100th anniversary of the UN Convention on the Rights of the Child, researchers and policy makers must heed pillar 4: that children have the right to engage in discussions around policies that affect them and their lives. There is wide international variation in the definitions, conceptualizations and operationalizations of violence; as such, our transdisciplinary team has undertaken a five country mixed-methods investigation of what acts of violence are considered normal, acceptable or common. As such, we use as our point of departure the potential impacts of violent acts on the health and wellbeing of children when they are not reported to be perceived as 'violence' and thus considered 'normative'. An analysis of existing policy documents across the five countries as well as quantitative survey data and qualitative focus groups and interviews, built around ecological momentary analysis is triangulated to inform policy and practice through our International Advisory Board. This paper presents the results of qualitative interviews from primary and secondary school children on their experiences, understandings, and definitions of violence as well as their capacity to define what is 'normal' and what is 'not normal' in the realm of violence in their everyday lives. We also report the impacts on their health and wellbeing, through their eyes. We conclude with their voices targeted at policies to change the behaviour of adults in order to ensure a better future for them and their own children.

### Socioeconomic status

**Financial assets and mental health after job loss** Catherine Ettman\* Catherine Ettman, Grace V. Ringlein, Rajesh Satpathy-Horton, Elizabeth A. Stuart,

While there is strong evidence on the effects of job loss on mental health, there is less evidence about the role of wealth in protecting mental health following job loss. Using data from the CLIMB study, a longitudinal cohort of working-age U.S. adults (18-64 years) surveyed in Spring 2020, 2021, 2022, 2023, and 2024 (n=581), we assessed depressive symptoms following job loss and tested for effect heterogeneity by wealth. First, we estimated the effect of early pandemic job loss on depressive symptoms (PHO-9 scores, 0-27) across 5 survey periods (2020-2024) using survey weighted, propensity score balanced generalized estimating equation (GEE) models. A doubly robust propensity score model was used to estimate the average treatment effect on the treated (ATET). Models included age, gender, race and ethnicity, housing status, savings, marital status, region, income, and previous depression diagnosis. Second, we estimated the effect of job loss on depressive symptoms stratified by savings groups, using GEE with survey and propensity score weights. The full model estimated an increase of 1.11 points (p=0.16) in depressive symptoms relative to no job loss on average across the 5 timepoints. Stratified models showed an increase of 0.92 points (p=0.17) for those with >\$25,000 savings and a 1.11 point increase (p=0.30) for those with <\$25,000 in savings. We found evidence of a small but non-significant effect of early pandemic job loss on depressive symptoms overall in U.S. adults from 2020-2024. While persons with lower savings had higher depressive symptoms, we did not find evidence of a significant difference in the effect of job loss on mental health across savings groups, potentially due to sample size.

### Socioeconomic status

# Persistent Childhood Poverty and Housing Stability: Examining the Role of Healthcare Access and Chronic Health Conditions Marah Maaita\* Marah Maaita,

While research extensively examines childhood poverty's effects on economic mobility and health (Ratcliffe & McKernan, 2012; Yang, 2019), a significant gap exists in understanding its impact on adult housing stability. Emerging evidence links childhood poverty to adverse housing outcomes (Cohen-Cline et al., 2021; Gold, 2020; Heerde et al., 2024; Kendig et al., 2014), but the mechanisms remain unexplored. Healthcare access and chronic conditions represent a promising pathway, as childhood poverty often entails limited healthcare access (Dalton et al., 2016) that may constrain future economic opportunities and housing outcomes. In this study, I aim to examine whether healthcare access and chronic health conditions mediate the relationship between persistent childhood poverty and housing stability in adulthood. Specifically, I aim to address: (1) How does persistent childhood poverty influence housing stability in adulthood? and (2) To what extent do healthcare access and chronic health conditions mediate this relationship?

Using data from the Panel Study of Income Dynamics focusing on individuals born between 1984-1991 followed to age 30, I will define persistent childhood poverty as experiencing poverty for at least 70% of childhood years (ages 0-17), with sensitivity analysis at 50% (Ratcliffe & McKernan, 2020; Yang, 2019). Housing stability is measured through homeownership status and residential mobility. Logistic and Poisson regression models will assess both direct effects and potential mediation through healthcare access (health insurance) and chronic conditions (e.g. asthma, hypertension, heart disease, and diabetes), controlling for demographic, family, and regional factors. This study aims to provide targeted policy recommendations for improving preventive healthcare for low-income children and early interventions for chronic condition management to prevent cascading economic disadvantages.

### **Structural factors**

Work in Transition: Employment Quality, Precarity, and Mental Health Among Black Emerging Adults in the San Francisco Bay Area Sarah Andrea\* Sarah Andrea, Holly Nishimura, Deborah Karasek, Adrienne Mocello, Sheri Lippman, Margaret Libby, Marguerita Lightfoot,

Employment in the US has evolved alongside a weakening social safety net, exacerbating labor market discrimination and precarious work, especially for emerging adults. However, employment quality and its health impacts remain understudied in this group. This study examines employment profiles and mental health among 300 low-income Black emerging adults (BEA; ages 18-24) participating in a quaranteed income trial in the San Francisco Bay Area. We used latent class analysis to identify clusters based on job stability, material rewards, and working-time arrangements and examine participant characteristics across these clusters. Five clusters emerged: Full-time, Consistent: Part-time, Consistent Student Workers: Piecemeal Gig Work: Underemployed Students: Minimally Attached. 27% were in the highest-quality employment group ("Full-time, Consistent"), while 31% were in the lowest-quality groups ("Piecemeal Gig Work" and "Underemployed Students") and an additional 23% were Minimally Attached to the labor force. Even among "Full-time, Consistent", only 7.4% earned above the city median, 14% had employer-sponsored health insurance, and 43.2% worked multiple jobs. More precarious clusters were disproportionately comprised of women, those with children, and were more likely to have participants with prior legal involvement, and greater childhood adversity. Compared with Full-time, Consistent, those in Piecemeal Gig Work had a greater number of anxiety symptoms on average (9.91 vs. 8.97 symptoms) while those Underemployed Students had a greater prevalence of major depression (15.4% vs. 10.10%). Findings underscore the structural constraints shaping BEA's labor market entry and the pervasiveness of precarity, even in seemingly stable jobs. Applying a multidimensional typological approach enabled us to see important nuances in the configuration of BEA employment arrangements and their collective relationship with mental health, even among those from lowincome neighborhoods.

### **Structural factors**

Neoliberalism and the U.S. population health deviation: Investigating the mechanisms driving international differences & maintaining sub-national inequities Maren Spolum\* Maren Spolum,

Multiple scholars investigating the U.S. health disadvantage have called for further analysis into the timing of the U.S. health deviation in life expectancy from OECD peer countries in the early 1980s. That timing is important because the conjuncture in the U.S. political-economic system embracing neoliberalism aligns temporally with a stark and sustained deviation in life expectancy between the U.S. and international peer nations. This presentation will offer a brief history of neoliberalism in the United States, which was introduced in the U.S. in the 1940s, integrated within the Nixon and Carter administrations in the 1970s, before being unleashed at the federal policy making level in 1981, when President Ronald Reagan assumed office. Since then, it has been the primary mode of governance across subsequent Democrat and Republican administrations. This presentation will offer a framework for understanding neoliberalism beyond a set of economic processes, but as a political project and a system of power, that reconfigured relationships between the state, civil society and market actors. It will then present an analytic framework connecting this historically grounded understanding of neoliberalism, to the decline in US population health metrics and the maintenance of US health inequities.

**Aging** 

Associations of place of death with prevalence of social risks: Findings from the Detroit Research on Cancer Survivors (ROCS) study. Jamaica Robinson\* Jamaica Robinson, Nora Akcasu, Theresa Hastert,

**Background:** Home has surpassed the hospital as the most common place of death in the United States-especially for patients with cancer. While prior evidence suggests low socioeconomic status cancer patients are less likely to have a home-based death, little is known about how the prevalence of social risks, which are common among cancer patients with the fewest financial resources, differs by place of death.

**Methods:** Our analyses included 119 decedents who were diagnosed with advanced cancer and who participated in the Detroit Research on Cancer Survivors (ROCS) population-based cohort of Black cancer patients within the 12 months prior to their death. We measured social risks(i.e., housing instability, food insecurity, utility shutoffs, neighborhood safety, and not seeking health care because of cost or a lack of transportation) using decedents' last follow-up survey. We assessed place of death via death certificates, categorizing decedents as dying at home or in a hospital. We used modified Poisson models to estimate prevalence ratios(PR) and 95% confidence intervals(CIs) of place of death with social risks, controlling for sociodemographic and cancer-related factors.

**Results:** Fifty-two percent of decedents experienced a home-based death, and nearly 37% of decedents reported experiencing  $\geq 1$  social risk within the year prior to death. The relative prevalence of reporting  $\geq 1$  social risk was marginally lower for those who died at home versus in hospital(PR:0.95; 95% CI:0.59-1.51); however, the relative prevalence of housing instability, food insecurity, and transportation insecurity was modestly greater for those who died a home-versus hospital-based death.

**Conclusion:** The burdens of specific social risks were greater for Black cancer decedents who died at home versus in a hospital. Community engaged social work and supportive care planning may present opportunities to screen for and address these social risks for cancer patients experiencing a home-based death.

Chronic disease

Using participatory methods to develop English and Spanish versions of the Prediabetes-Related Stress Scale (PRSS) Deshira Wallace\* Deshira Wallace,

BACKGROUND. Prediabetes is a risk factor for type 2 diabetes. The transition from prediabetes to type 2 diabetes is inequitable, with Latinos reporting an increased risk than other groups. Stress can affect this transition; however, we have no means of measuring prediabetes-related stress.

RESEARCH DESIGN AND STUDY SAMPLE. We used group concept-mapping, a participatory mixed-methods approach to collect data from English- and Spanish-speaking Latino adults (18+ years old) living with prediabetes in the United States (n=36). Participants were invited to four activities. First, brainstorming around focal questions about the stress of prediabetes diagnosis and management. Second, individually sorting 86 brainstormed statements into like groups, and rating these statements based on perceived importance. Third, interpreting quantitative results. Finally, we invited participants to complete cognitive interviews of the initial English and Spanish versions of the scale to assess comprehension and scale structure.

RESULTS. Thirty-six participants engaged in one or more activities. Results from the sorting and rating activities resulted in 10 clusters that reflect how participants grouped the 86 statements. The clusters were shared with participants to support the interpretation of the data. Cognitive interviews revealed participant suggestions to improve comprehension of instructions, response options, and items. This iterative process resulted in a 29-item scale developed in English and Spanish.

CONCLUSION. We centered participant experiences to create the first scale of its kind that focuses on the emotional health related to prediabetes diagnosis and management. This scale can support diabetes prevention research by measuring prediabetes-specific stress and support clinical interactions to inform tailored conversations between patients and providers.

Chronic disease

Family Role in Decision-making about Childhood Overweight and Obesity Interventions: A Literature Review. Huda Shaikha\* Huda Shaikha, Asheley Skinner,

**Background:** A variety of effective treatments for childhood obesity exist; however, treatment aligned with family preferences is crucial for long-term success. This literature review explores families' decision-making and their role in childhood obesity treatment. Methods: A comprehensive search was conducted in PubMed. Inclusion criteria entailed studies that explored family preferences in pharmacological and surgical interventions or their role in a family-based approach. Data was extracted by two independent reviewers, and the findings were synthesized thematically to identify key perspectives on treatment strategies. **Results:** Family plays a vital role in facilitating interventions for childhood obesity in four major domains. (1) Parents are often open to weight loss medications, especially when used as a supplement to lifestyle changes such as physical activity, considering their child's health, dissatisfaction with the previous weight loss attempts, and trust in their doctor's recommendations. (2) Family-based interventions are highly valued by parents, especially support in reducing screen time, encouraging physical activity, and fostering healthy eating habits to manage obesity. (3) Family-based interventions focused on enhancing parenting skills and fostering healthy family behaviors demonstrated significant effectiveness in preventing childhood obesity. Highlighting the fact that children's eating and physical activity are highly influenced by parental behaviors. (4) Finally, parents have varied opinions on bariatric surgery for their children. While some perceive it as a beneficial tool that promotes weight management, others consider it a superficial solution that ignores psychological contributing to obesity. **Conclusion:** This study found that family role in childhood obesity treatment decision-making is crucial, emphasizing their influence in promoting healthy behavior while also noting diverse opinions on pharmacological and surgical options.

Chronic disease

Adolescent Exposure to Deadly Gun Violence Predicts Asthma Burden in Early Adulthood Connor Martz\* Connor Martz, Lauren Gaydosh,

Background: Gun violence is a pervasive neighborhood stressor that may influence asthma morbidity. Using a large population-based birth cohort of US youth, we examined whether adolescent exposure to deadly gun violence predicts new asthma diagnoses and other asthmarelated outcomes in early adulthood.

Methods: Data were drawn from the Future of Families and Child Wellbeing Study, restricted to participants without asthma at age 15 (n=1,936). Adolescent exposure to deadly gun violence was measured as the count of incidents within 1600 meters of their homes in the year before age 15 assessments. Logistic and linear regression models tested associations between adolescent exposure and self-reported asthma outcomes at age 22, including diagnoses, hospitalizations, and functional limitations. Models adjusted for time-varying socioeconomic factors, area-level violent crime, and asthma-related risk factors. We also examined sex differences and whether accelerated epigenetic aging mediated these associations.

Results: Adolescents exposed to higher levels of deadly gun violence had increased odds of being diagnosed with asthma by age 22 (OR=1.22; 95% CI: 1.03 to 1.45). This association was stronger for males (OR=1.50; 95% CI: 1.21 to 1.85) but was not significant for females (OR=1.03; 95% CI: 0.63 to 1.67). Closer residential proximately to deadly gun violence further elevated asthma risk. Among those diagnosed after age 15, higher exposure was also linked to greater asthma severity (B=0.23; 95% CI: 0.08 to 0.38) and higher likelihood of asthma-related hospitalization (OR=3.94; 95% CI: 1.53 to 10.20). These associations were not mediated by accelerated epigenetic aging, measured at age 15.

Conclusion: Adolescent exposure to deadly gun violence predicts new asthma diagnoses, severity, and hospitalization in early adulthood, particularly among males. Findings advance our understanding of the long-term effects of exposure to gun violence during sensitive periods of development.

Chronic disease

**Examining the Structural Capacity of CBOs through a Modified SWOT Analysis** Gianna D'Apolito\* Gianna D'Apolito, Niko Verdecias-Pellum,

Addressing social needs like food and housing is increasingly recognized as essential for improving health outcomes and managing chronic diseases. However, there's a notable gap in the literature on implementing these programs within Community-Based Organizations (CBOs). Through an environmental scan, this study assesses the structural capacity—defined as the systems, resources, and infrastructure of CBOs—to integrate social needs protocols into their services. We conducted a literature review using 17 search terms across PubMed, SCOPUS, and a general Google search, yielding 224 records from November 2024 to January 2025. Of these, 23 articles were relevant based on title and abstract analysis.

The data were analyzed using a modified SWOT analysis, restructured into two broad categories: facilitators (strengths and opportunities) and barriers (weaknesses and threats), to examine structural capacity influences on a spectrum from internal to external factors from a CBO perspective. Factors that did not fit neatly into internal or external categories were classified under "other." Facilitators ranged from internal processes like addressing social needs and patient navigation to external elements such as CBO-community relationships and partnerships. Barriers included internal challenges like data management capabilities and limited staff interaction, to external issues like inconsistent provider referrals and social needs tracking. Additional considerations included organizational, state, and national policies, as well as the populations served. This analysis helps lay the groundwork for enhancing CBO capacities in addressing social needs and managing chronic diseases.

Chronic disease

Psychological Stressors and Diabetes Self-Management: A Community-Engaged Research Approach With Rural African Americans in the Missouri Bootheel Idethia Shevon Harvey\* Idethia Shevon Harvey, Maude Harris, Greta Hermann,

**Introduction:** Type 2 diabetes management presents significant challenges in rural African American communities due to healthcare access limitations and socioeconomic barriers. Our study uses a community-engaged methodology through the Cooperative Extension Service to examine relationships between psychosocial stressors and diabetes self-management in this underserved population.

**Methods:** The pilot study engaged 49 African Americans (mean age=65.9 years) with type 2 diabetes (diagnosis age=47.2±13 years) from the Missouri Bootheel. Participants completed validated measures assessing diabetes self-care, depression, stress, relationship strain, diabetes distress, discrimination, and financial wellbeing.

**Results:** Financial insecurity correlated with depression (r=-.46, p<.01) and emotional burden (r=-.52, p<.01). Parental stress associated with emotional burden (r=-.54, p<.01), depression (r=-.48, p<.01), and perceived stress (r=-.48, p<.01). Perceived stress strongly correlated with diabetes distress (r=-.64, p<.001), emotional burden (r=-.67, p<.001), interpersonal stress (r=-.55, p<.001), regimen-related stress (r=-.59, p<.001), and depression (r=-.52, p<.001). Discrimination experiences correlated with physician-related distress (r=-.44, p<.01).

**Discussion:** The findings suggest that effective diabetes interventions must address not only clinical management but also psychological stressors including financial insecurity, parental responsibilities, and experience of discrimination. By partnering with Extension Specialists, the study ensures cultural competence through established networks, creating a replicable framework for addressing rural health disparities. While our results are promising, larger-scale studies are needed to validate these findings and develop targeted, culturally-responsive interventions.

### **Environmental factors**

Mapping the Silent Killer: Characterizing Humid Heat Waves in Mississippi Salit Chakma\* Salit Chakma, Mohammad Al-Hamdan, Lauren S. Pongetti, Md Minhazul Abedin, Tasnim Tabassum, Benjamin Walker, Fazlay Faruque,

Heat waves affect human health in ways that often are gradual and without visible warnings, earning them the designation "silent killer". Humid heat waves, which combine high temperatures with humidity, are more detrimental than heat waves based on dry-bulb air temperature, as the presence of high humidity amplifies apparent temperature and affects the human body's thermoregulation, worsening underlying illnesses. Therefore, it is imperative to characterize humid heat waves to discern their adverse impacts on human health. This study uses the heat index, a widely used measure of apparent temperature. A dataset comprising 1,232 days of downscaled (1kilometer) North American Land Data Assimilation System (NLDAS) daily heat index data from warm seasons (May - September) between 2015 and 2022 was used in characterizing heat waves in Mississippi. Heat waves were defined as periods of ≥3 consecutive days with a heat index exceeding 90 °F. The nonparametric Mann-Kendall test was used for trend analysis, and Theil-Sen's slope was used to calculate the change rates of frequency, duration, and intensity of events. Emerging hotspot analysis identified persistent and emerging zones of humid heat wave activity. This study improves past research by using high resolution temperature data accounting for atmospheric humidity. These improvements will allow the delineation of zones needing precautionary measures to minimize the impacts of the extreme humid heat on human health. Additional analyses will examine the relationship between humid heatwave characteristics and population health, with the goal of refining risk assessment models and improving targeted public health interventions.

### **Environmental factors**

Assessing and Collecting Environmental Samples Across Colonias in Hidalgo County, TX: Community-Engaged Strategies for Data Collection Kayla Morales\* Kayla Morales, Garett Sansom.

Collecting primary environmental and human toxicological data in vulnerable communities presents significant challenges due to historical distrust of researchers, logistical barriers from inadequate infrastructure, and socioeconomic obstacles that hinder participation. Without meaningful engagement strategies, data collection efforts risk low participation, potential biases, and unreliable findings. This work draws from efforts at the Texas A&M University Superfund Research Center and the Together for a Better Tomorrow program to highlight strategies for community-driven data collection in historically underserved areas. Specifically, we focus on methods designed to improve environmental sampling, risk assessment, and public health interventions in the Colonias of Hidalgo County, Texas, along the U.S.-Mexico border. These communities face significant environmental and human health risks due to exposure to contaminants from agricultural runoff and failing infrastructure, particularly in water and sanitation systems. To ensure culturally competent and rigorous data collection, we will provide strategies for incorporating three key community-driven approaches that emphasize trust-building, co-participation, and transparent dissemination of findings.

- 1. Utilization of a Promotora-led environmental sampling model, where community health workers are trained to conduct soil sampling across multiple Colonias. This participatory model increases accessibility and community trust while ensuring culturally appropriate data collection and risk communication.
- 2. Creation and maintenance of Community Advisory Boards (CABs) to facilitate bidirectional communication between researchers and community members. CABs play a key role in study design, ensuring that sampling locations, exposure assessment methods, and toxicological endpoints align with community concerns and regulatory risk assessment approaches.
- 3. Best practices for risk characterization and data dissemination efforts. Strategies for reporting findings to community organizations, individuals, and state authorities ensure that toxicological risk assessments lead to actionable public health interventions. The integration of human health risk assessment models, such as hazard quotient (HQ) and lifetime cancer risk (LCR) calculations, will be emphasized in communicating findings.

Preliminary data will be utilized to highlight the success of this model, including environmental sample collection within individuals' homes, achieving a response rate of over 90%. These findings demonstrate the effectiveness of Promotora-led engagement in overcoming traditional barriers to participation. Additionally, early spatial analysis of contaminants reveals significant variability across Colonias, highlighting the necessity of this approach as a crucial step in toxicological risk assessment efforts that rely on primary data collection to quantify exposure levels and evaluate potential health risks in affected populations.

Gender

The Double-Edged Sword: Unveiling the Impact of Women's Financial Inclusion on Intimate Partner Violence in India Shreemoyee Saha\* Shreemoyee Saha, Punarjit Roychowdhury, Gaurav Dhamija,

We empirically examine the causal impact of women's financial inclusion on their exposure to Intimate Partner Violence (IPV) using data from the fifth round of the National Family Health Survey (NFHS), India. Establishing a causal link between women's financial inclusion and IPV, however, is challenging due to unobserved confounders and reverse causality. To overcome these obstacles, we adopt a nonparametric bounds approach. Relying on fairly weak assumptions, we find robust evidence that women's financial inclusion leads to a significant increase in their exposure to IPV. Further, we provide suggestive evidence that this result arises because women's financial inclusion is likely to disrupt patriarchal beliefs about gender roles, leads to female guilt, and increases husbands' use of IPV for instrumental reasons. Our findings suggest that empowering women financially, while crucial, may inadvertently increase their vulnerability to IPV unless such initiatives are paired with efforts to shift underlying cultural norms surrounding gender.

### **Health behaviors**

A qualitative exploration of youth experiences of social support in the context of HIV prevention in western Kenya Nema C.M. Aluku\* William Story, Yvonne Wanjiru, Maureen Wanjiru, Catherine Muteithia, William T. Story,

**Background:** Kenya has some of the highest rates of HIV in the world, with adolescents being particularly vulnerable to infection. Social support can significantly influence HIV prevention norms and behaviors. The primary objective of this study is to document the experiences of social support when addressing HIV prevention among adolescents in western Kenya.

**Methods:** This study was implemented in three counties in western Kenya: Uasin Gishu, Nandi and Kakamega. In-depth interviews (IDIs) were conducted with 12 adolescents (15-19 years), 6 parents, 6 religious leaders, 6 teachers, and 6 healthcare workers. All IDIs were audio recorded with consent, transcribed verbatim, and translated into English. Transcripts were thematically coded using Dedoose and code summaries were developed to identify factors associated with youth social support.

**Results:** Youth and parents mentioned that adolescents sought emotional support from their parents/guardians because they felt comfortable and encouraged by them. When it comes to HIV, adolescents reported seeking guidance from doctors for their expertise and parents due to their trust in them. Religious leaders, parents, and healthcare workers noted that adolescents consulted doctors because they are professionals who would provide good advice and ensure confidentiality. Overall, social support made young people feel valued, loved, and understood by their parents and guardians. Youth expressed feelings of relief and contentment following conversations about stressful situations, including HIV. Most adolescents trusted the information provided by familiar and respected individuals.

**Conclusion:** Overall, adolescents had positive experiences with social support, turning to parents/guardians for social support and doctors for information about HIV. These results provide useful information for future social support interventions to improve HIV prevention among adolescents in western Kenya.

# **Health behaviors**

A Qualitative Study of How Black Adults with Systemic Lupus Erythematosus Approach Critical Health Behaviors Anushka Patil\* Anushka Patil, Rachel Bergmans, Rhiju Chakraborty, Nikita Sangavi,

**BACKGROUND:** Community-engaged research can help advance equity in conditions like systemic Lupus Erythematosus (SLE), which is a significant cause of death and disability among Black communities. Existing care guidelines for SLE fail to integrate the importance of lifestyle changes and self-care for symptom management. Consistent with community-engaged principals, qualitative evidence can inform new interventions and clinical protocols by prioritizing lived experience and marginalized perspectives.

**AIM:** We aim to characterize how Black adults with SLE approach lifestyle changes and engage in health behaviors for symptom management.

**METHODS:** This study uses a community-engaged and interpretive description design. We conducted semi-structured interviews with Black adults who reported having SLE. Our inductive, thematic analysis approach focuses on four overarching health behaviors (nutrition, physical activity, sleep, and stress management). We are collaborating with the University of Michigan's Community Advisory Board for Lupus Carea and Research (Lupus CAB), which is composed of Black women with SLE, throughout our data interpretation and dissemination to ensure the accuracy and relevance of our findings.

**RESULTS:** We completed 30 interviews (96% female, mean age = 41 years). Our preliminary results include the following categories: (1) managing inflammation and every levels with dietary changes, (2) finding success with low-impact activities, (3) balancing rest and activity, (4) embracing mental health promotion to regulate stress, (5) navigating social context.

**NEXT STEPS:** We will present our preliminary results to the Lupus CAB for input before we refine our themes for final confirmation with the Lupus CAB.

**CONCLUSIONS:** Findings highlight the lifestyles that help manage symptoms in the face of the physical restrictions imposed by SLE. In addition, results offer insights into the challenges that hinder appropriate health behaviors.

## Health care/services

Patient and Provider Perspectives on Social Needs Screening: A Comparison of Two Screening Tools Lorraine Kwok\* Kayla Fennelly, Alessandra Calvo-Friedman, Jenifer Clapp, Julie Hyppolite, Rachel Massar, Arya Singh, Nichola Davis, Carolyn Berry,

The acceptability of social needs screening and referral in primary care settings by both providers and patients has been increasingly studied as the practice becomes more ubiquitous. A qualitative study across three clinics at New York City Health + Hospitals (H+H), the country's largest urban safety net hospital, explored patient and provider perspectives on social needs screening with a focus on documentation of needs in the electronic medical record (EMR)and a comparison of two screeners. A convenience sampling approach recruited participants across three H+H clinics. Patients, caregivers of pediatric patients, and providers reviewed a copy of the current H+H screener and the New York State version of the Accountable Health Communities (NYS AHC) screener. In total, we interviewed 22 patients/caregivers and 6 primary care providers. Rapid qualitative analysis was used to analyze transcripts. Patients had little to no concern about documentation of social needs in the EMR and many viewed it positively, noting that it would help their doctors better understand their life situations. However, many patients expressed frustration over the lack of follow up when they had screened positive for a need, especially if they were being screened at every visit. Providers also mentioned patient frustration with the referral process. Regarding screener comparison, there was no clear preference amongst patients for one screener or the other. Providers had concerns regarding the length and complexity of the NYS AHC screener and the presence of domestic and interpersonal violence questions. These results suggest that discomfort related to social needs screening is not related to the screener's wording but arises from challenges connecting patients to resources, highlighting the importance of ensuring that screener questions are tied to resources for all screened patients.

# Health care/services

Clinical integration of CHWs in New York State: Preliminary findings from a community-driven qualitative study Meghan Armocida\* Meghan Armocida, Kayla Fennelly, Dina Pimenova, Denise Navarrete, Amy Freeman,

Increasing evidence demonstrates that Community Health Workers (CHWs) improve population health outcomes and inequities by bridging gaps in care and addressing social determinants in culturally responsive ways. Understanding organizational capacity to integrate CHWs into clinical teams is becoming increasingly important as recent Medicare and Medicaid policy changes provide reimbursement for CHW services. This qualitative study aimed to identify facilitators and barriers to clinical integration of CHWs across New York State in order to understand how to better support this workforce and the organizations in which they are embedded. We recruited participants using a community-based convenience sampling approach and conducted focus groups with CHWs, clinical and community-based providers, and consumers to explore domains such as role clarity, team integration, documentation, organizational support, and sustainability. To date, we have completed 7 of 11 planned focus groups and will use rapid analysis to identify key themes. Preliminary findings framed using the Consolidated Framework for Implementation Research highlight inner setting factors such as supervisor engagement, reporting structures, and workplace resources (e.g. office space). Lack of role clarity creates tension between CHWs and clinical teams while clear role definitions, thorough orientation, ongoing training, and recognition of CHWs' work aid in integration. Outer setting challenges include lack of reliable funding, lack of social service resources, and potential inadequacy of reimbursement mechanisms. Perceptions about the utility of formal CHW certification were mixed. In further analysis we will compare themes across settings and with consumers. Barriers should be addressed to enable effective partnership between CHWs and clinical settings. Similarly, facilitators can be strengthened and shared as best practices. The need for greater funding stability and recognition of the CHW workforce persists.

# Health care/services

Prioritizing input from physicians to develop a cannabis education program for chronic pain management in primary care settings Sia Rajgarhia\* Sia Rajgarhia, Riley Wegryn – Jones, Arie Shaw, Bhaavna Yalavarthi, Catherine Klida, Vivian Kurtz, Kevin Boehnke, Amy Bohnert, Pooja Lagisetty, Rachel Bergmans,

**Background:** With cannabis legalization expanding in the U.S., interest in cannabis for chronic pain has grown. Our community-engaged research program focuses on cannabis therapies, particularly among Veterans who experience high rates of chronic pain. Many Veterans desire to receive guidance from healthcare providers. Yet, gaps in clinical care persist, especially concerning physician knowledge and biases. Primary care physicians (PCPs) face challenges accessing evidence-based data on cannabis, including potential benefits, safety, and interactions with other drugs. PCPs also grapple with limited time and insufficient guidance from health systems.

**Aim:** We aimed to assess PCP perspectives on the development of an educational program about the evidence base of cannabis for chronic pain.

**Methods**: We conducted semi-structured interviews with PCPs who treat adults with chronic pain in Michigan to assess their preferences for a cannabis education program (n=15). We used an adapted Rigorous and Accelerated Data Reduction technique to analyze the data and develop preliminary findings.

**Results:** Participants were 33% men, 66% women, with an average age of 44 years. Analysis revealed five main themes: gaps in medical education, scientific justification for efficacy and safety, program convenience, adaptive delivery methods, and pragmatic implementation. We also noted that education programs should be efficient, accommodate varied schedules, and offer resources suited to PCP needs, such as recordings, live discussions and real-world examples.

**Conclusions:** PCPs are interested in cannabis training for chronic pain management. The curriculum must clarify evidence sources and acknowledge persisting knowledge gaps for both patients and physicians. These findings lay the groundwork for developing and piloting a cannabis curriculum for PCPs, which will provide patients with the resources they need to make informed health decisions.

#### Health care/services

Drivers of Variation in Human Papillomavirus Vaccination Rates among Adolescent Dependents within the Military Health System Joel Segel\* Joel Segel, Mark Ramos, Nicholas Zaorsky, Eugene Lengerich, Guangqing Chi, Alison Chetlen, Patrick Luan, William Calo,

#### **Purpose**

To estimate the relative importance of family and provider factors in explaining geographic variation of HPV vaccination among adolescent dependents within the Military Health System (MHS).

#### Methods

Using 2007-2019 MHS Data Repository Data, we identified a sample of adolescent dependents of military service members who were continuously enrolled in TRICARE from age 9 to 13, 15, or 17 depending on outcome; and who had not been vaccinated by age 11. We estimated Kaplan-Meier curves of vaccination rates and estimated the effect of parent factors (rank, service branch) and catchment area factors (average per capita spending and fraction of care purchased from the private sector). We also used the random nature of military family moves to disentangle the relative importance of family and provide factors in explaining the observation variation in HPV vaccination rates. Specifically, we estimated the likelihood of adolescents unvaccinated at age 11 who moved from catchment areas with low (or high) vaccination rates to catchment areas with high (or low) vaccination rates as well as the impact of multiple moves on subsequent HPV vaccination rates.

#### Results

HPV vaccination rates were lower among adolescents of parents with more senior rank. Adolescents moving from lower HPV vaccination rate catchment areas to higher HPV vaccination rate catchment areas were significantly more likely to become vaccinated emphasizing the importance of provider factors in explaining variation in HPV vaccination. Adolescents experiencing multiple moves were significantly less likely to become vaccinated.

#### Conclusions

Adolescents who experience the disruption from multiple moves during adolescence are significantly less likely to receive HPV vaccination. Provider factors explain much of the variation in adolescent HPV vaccination rates within the MHS. Understanding successful approaches of high HPV vaccination catchment areas; and targeting interventions to families experiencing multiple moves during adolescence is critical to improving HPV vaccination within the MHS.

## Health care/services

Comparison of Three Social Needs Screeners' Performance and Patient Preference Lorraine Kwok\* Kayla Fennelly, Alessandra Calvo-Friedman, Jenifer Clapp, Julie Hyppolite, Rachel Massar, Nichola Davis, Carolyn Berry,

A standardized practice of social needs screening and referrals has been in place at New York City Health + Hospitals (NYC H+H), the largest urban safety net system in the US, since 2017. H+H uses a customized screening tool that is fully integrated into its EHR, developed with input from an expert panel and after review of other screeners. However, recent guidelines from New York State require the use of a version of the Accountable Health Communities (AHC) tool to qualify for reimbursement of social needs screening of Medicaid participants and to unlock access to resources for Medicaid participants. This study compared the performance of and patient preference for NYC H+H's social needs screener to the New York State (NYS) version of the AHC screener as well as the WellRx tool, another widely used screener, to assess and compare their capture of social needs amongst the same patients. Two H+H primary care clinics provided data for analysis from a convenience sample of 100 patients who completed an H+H screener and one of the alternate screeners during May-June 2024 (50 patients completed the WellRx screener and 50 completed the NYS AHC screener). Analysis of screener results compared rates of needs detected, number and types of needs identified, and patient screener preference. The H+H screener performed similarly to both alternate screeners in identifying patients with social needs, ( $\kappa$ =.7, p<.001 and  $\kappa$ =.6, p<.001). The number of positive items identified by each screener was virtually identical. Patients preferred the H+H screener to the alternates, although the preference was not statistically significant. Despite differences in question phrasing and response options, all three screeners performed similarly. We conclude that requirements for social needs screening can allow for flexibility in choice of screeners as our findings strongly suggest that screeners can vary in phrasing and structure without compromising performance in identifying social needs.

Health equity

Exploring Barriers and Facilitators of Telehealth Use Among Asian Indians in Washington State: A Qualitative Study Priyanka Gautom\* Priyanka Gautom, Cara Eckhardt, Lisa Marriott, Cirila Estela Vasquez Guzman, Shoba Ramanadhan, Gloria Coronado,

Introduction: The COVID-19 pandemic caused a dramatic shift in the expansion of telehealth across the country. Yet, many policies that endorsed broader telehealth access are expiring in 2025. The end of these temporary policies brings attention to challenges that remain, specifically regarding the use of telehealth. Current literature highlights the persistent low use of telehealth among culturally and linguistically diverse populations. However, despite being one of the largest immigrant communities in the country, little is known about Asian Indians' experiences with telehealth. This study gathered perceptions from Asian Indians to understand their use of telehealth and identify ways to expand access for this community.

**Methods:** We used purposive sampling to recruit Asian Indian adults who lived and received healthcare in Washington State. Participants were recruited through flyers in culturally relevant locations and social media channels. The social-ecological model guided the formation of the semi-structured interview guide and analysis. All interviews were recorded, transcribed, and coded using thematic analysis to identify key themes.

**Results:** Twelve participants were interviewed, more than half of whom had used telehealth previously. Overall, participants reported some level of comfort with technology and noted several conveniences of telehealth, such as the ability to seek care without commuting to the clinic. Barriers to telehealth included the inability to communicate non-verbally, negative perceptions of healthcare in the U.S., and the lack of knowledge of telehealth due to the absence of discussion by care providers. Participants identified physicians, clinics, and reputable health organizations as trusted sources for learning about new health information or services, like telehealth.

**Conclusions**: These findings can inform future initiatives aimed at engaging Asian Indians in telehealth, particularly given the persistence of the digital divide.

Health equity

Understanding the Needs of Adolescents and Young People Living with HIV in Nigeria through a Socioecological Lens: A Qualitative Study Rejoice Obiora\* Rejoice Obiora, Babatunde Adelekan, Gideon Nwankwo,

**Background:** The prevalence of HIV in Adolescents and Young people (AYP) in Nigeria is around 2% with a large gap in HIV treatment compared to the general population. AYP living with HIV face stigma and discrimination which is exacerbated by socio-cultural norms that increase their risk for HIV and lack of uptake of HIV services. The purpose of this study is to understand the needs of adolescents and young people living with HIV in Nigeria using the socioecological model.

**Methods:** In-depth interviews (IDIs) were conducted with 40 AYPLHIV and key informant interviews (KIIs) with 20 focal persons and healthcare workers in four states in Nigeria: Abuja, Nasarawa, Akwa Ibom and Kaduna State. The interviews were conducted using a semi-structured question guide which was developed based on the research objectives and the social ecological model. Data analysis was carried out using Dedoose version 9.0.

**Results:** The data analysis revealed multiple challenges experienced by adolescents and young people living with HIV/AIDS. These challenges include social stigma, self-isolation, disclosure concerns, trust issues, limited access to mentorship, and financial hardships. These challenges manifest across individual, interpersonal, and structural levels, impacting their overall well-being and engagement in HIV care and support services. These consequently affected their access to and utilization of healthcare services, their social relationships with themselves, partners, peers, and family, and ultimately, their overall quality of life.

**Conclusion:** Based on the findings of this research, there is a need for contextualized interventions including the involvement of AYPLHIV in HIV programing to meet the needs of these young people and to address the challenges they face across different levels identified in the study, including individual, family, friends, community, and the healthcare system.

Health equity

Community Health Needs & Assets Assessment in Partnership with Haitian Residents
Living in Harris County, Texas Roldyne Dolce\* Roldyne Dolce, Andrew Springer, Dorothy Dupuy,
Katia Jean Baptiste, Nikkii Dolce, Thalia Micah, Voltaire Archelus,

Despite their growing numbers, there is little to no information collected on the health of Haitian/Haitian American residents in the U.S. This community assessment study aims to address these gaps by assessing current health needs, assets and opportunities for health improvement in partnership with Haitian/Haitian American residents of Harris County, Texas. This presentation describes our assessment and presents initial findings from two visioning sessions. Our mixed methods research approach, guided by Mobilizing for Action through Planning & Partnerships framework, includes key informant interviews, focus groups with community members, and a community health assessment survey. In Phase 1, Partnership Development, a planning group of five interprofessional Haitian community members was formed to provide expert feedback and influence community participation. In Phase 2, Visioning, community members gathered to envision and describe an aspirational future for a healthy community. A thematic analysis was conducted to identify recurring themes generated via participatory inquiry activities. A total of 52 Haitian residents and allies participated in the visioning events. Participants defined the Houston Haitian community and identified outreach settings. Guiding principles included the value of holistic/herbal medicine, education, and leadership. Healthy community vision themes underscored a strong desire for chronic disease prevention, mental health improvement, and establishment of a community center that prioritizes culture preservation, integration, and resource allocation. These values and themes provide initial guidance for the assessment and development of a community vision of health. By empowering community members to voice concerns, we are setting a precedent for collaboration in the upcoming phases of this assessment. Our data will serve as a foundation for informing public health strategies to improve the health and quality of life of our Haitian neighbors.

Health equity

Preventing firearm violence exposure: The role of anti-poverty policy Angela Bruns\* Angela Bruns, Shani Buggs, Xiaoya Zhang, Nicole Kravitz-Wirtz,

Poverty and income inequality have wide-ranging and disproportionate effects on children and families living in marginalized, minoritized, and low-wealth communities. These effects include environmental, social-emotional, and behavioral health seguela that elevate the risk for, and racial/ethnic inequities in, community violence and harm. At the same time, limited but promising evidence suggests that strategies that influence structural and social determinants of health by enhancing economic opportunity and helping families avoid financial stress can prevent violence and promote well-being and intersectional racial equity beyond economic outcomes. The goal of this paper is to evaluate whether, how, and for whom two of the largest anti-poverty public policies in the United States—the Earned Income Tax Credit (EITC) and Additional Child Tax Credit (ACTC)—affect the determinants and prevention of community violence-related outcomes among low-income families and youth who are disproportionately affected by violence and its upstream structural and social causes. We use detailed micro-level data from the Future of Families and Child Wellbeing Study (FFCWS), a racially diverse longitudinal birth cohort study of structurally disadvantaged urban children and their families spanning tax years 1998-2017, and the "natural experiment" of variation across state, time, and family size in federal and state Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) benefits, to estimate the overall, and sex- and race/ethnicity-specific, associations of federal and state EITC and CTC benefits with adolescent exposure to neighborhood firearm homicide. At a time when policymakers are considering proposals to expand anti-poverty tax credits, this research will be among the first to contribute evidence on whether and how these policies can serve as strategies for reducing and preventing experiences of, and inequities in, violence and harm.

Health equity

School-based health centers and the utilization of primary care in rural communities Xue Zhang\* Xue Zhang, Sharon Tennyson, Chris Kjolhede, Wendy Brunner,

School-based health centers (SBHCs) in rural communities have the potential to improve students' access to primary care, but evidence on service utilization patterns is limited.

2011-2017 medical encounter data were used to examine primary care utilization (number of office visits, well-child, immunization, chronic-condition visits) for students with/without SBHC access in a four-rural-county region of New York. Students with SBHC access were stratified into those relying solely on SBHCs (SBHC-only-users), those using SBHCs and other care (hybrid-users), and those not using SBHCs (SBHC-non-users). Marginal effects of SBHC access and use were estimated, adjusting for age, sex, year, community-level socioeconomic factors, and student/school district random effects. Models were stratified by age groups (5-10, 11-18). Analysis was performed in 2025.

The comparison group was students without SBHC access. SBHC access was associated with greater use of primary care services. Hybrid-users and older students (ages 11-18) had the highest utilization, while SBHC-non-users had the lowest. 52% of SBHC users were SBHC-only-users. Those students had 0.61 more visits (95%CI: 0.54, 0.67) and were 14% more likely to have immunization visits (95%CI: 0.13, 0.15). Older SBHC-only-users were 9% more likely to have well-child visits (95%CI: 0.08, 0.11). Hybrid-users had more SBHC visits (0.97, 95%CI: 0.90, 1.04) and were more likely to use SBHCs for immunization visits (0.29, 95%CI: 0.28, 0.31).

Access to SBHCs increases primary care utilization in this rural region, especially for office visits and immunization visits among SBHC users and older students. Promoting students' use of SBHCs is important.

Health equity

Marked by the Stop: How Disability and Internalizing Symptoms Shape Adolescent Stigma and Trauma Post-Police Contact? Maya Lakshman\* Maya Lakshman, Isabella Castillo, Harolyn Belcher, Rebecca Fix,

Police encounters are a critical public health problem, often associated with mental health sequelae and anticipated and experienced stigma. Youth with intellectual and developmental disabilities (IDD) are especially vulnerable to structural violence, including that by police, yet how youth with IDD experience stigma remains understudied. This study used public-use data from Waves 4, 5, and 6 of the Future of Families and Child Well-Being Study. Whether or not youth had an IDD was obtained from parent/caregiver questionnaires in Waves 4 and 5. Stigma following police encounters was obtained via youth survey responses in Wave 6. We ran OLS regression models to assess whether the effect of police encounters (being stopped, experiencing intrusion like derogatory language or violence, or being arrested) on stigma differs based on disability status (accounting for other forms of disability), controlling for demographic variables, internalizing mental health symptoms, and posttraumatic stress following police encounters. Our study sample included 765 young people. Findings indicate that youth with IDD report significantly less stigma after being stopped ( $\beta$ =-0.219, p<0.01), experiencing intrusive interactions ( $\beta$ =-0.057, p<0.05), or being arrested ( $\beta$  = -0.196, p<0.05) compared to their peers without IDD. Furthermore, youth with IDD report significantly less anticipated stigma after being stopped ( $\beta = -1.293$ , p<0.05) or arrested ( $\beta = -1.604$ , p<0.05), and less experienced stigma after being stopped ( $\beta = -0.881$ , p<0.01) or experiencing intrusive interactions ( $\beta$ =-0.267, p<0.05). Results suggest youth with IDD may perceive or process police encounters differently due to limited education on the criminal justice system, differences in social awareness, or a desire to fit in with their peers. Findings can inform public health equity interventions, including the need for tailored educational programs for youth with IDD and broader disabilityinclusive policy reforms.

Health equity

Bridging the Health-Wealth Gap: Evaluating the Impact of Digital and In-Person Enrollment Methods on WIC Access Shreya Srinivasan\* Timothy Scheinert,

# **Background**

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) addresses nutrition needs of mothers and children and provides a benefit of \$50 per month. Link Health (LH) is a nonprofit leveraging hybrid platforms to support low-income individuals through enrollment in benefit programs. LH promotes access to essential resources, improving health and economic stability for communities.

# **Objective**

This study evaluates digital and in-person enrollment in WIC in Boston and Houston and focuses on understanding how enrollment strategies impact sign-up rates and engagement.

#### **Methods**

Applicants are screened in-person at clinics and remotely via text-message by patient navigators (PNs). PNs facilitate application submissions, and demographic data is stored in a Google Firebase Dashboard. Descriptive statistics for sign-ups across methods are described.

#### **Results**

Since February 2024, 128 individuals, most commonly 30-44 years old (38%), enrolled in WIC digitally and in-person, receiving \$91,440 in benefits. 47 individuals (37%) signed-up digitally and 81 (63%) in-person; all enrollees identified as Hispanic; of respondents who indicated a preferred language, 45% (n=10) preferred Spanish, and 9% (n=2) preferred Haitian-Creole. \$33,840 was disbursed for families who signed-up digitally compared to \$57,600 in-person. 23% (n=29) of enrollees were women.

#### **Conclusions**

Digital sign-up can decrease the health-wealth divide by easing access to benefits. By leveraging virtual platforms, LH helps underserved communities, particularly Hispanic women, access resources to combat malnutrition. Digital enrollment helps overcome physical limitations such as transportation, wait times, and geographic distance. Challenges persist for those with limited digital literacy or technology access, highlighting the need for in-person outreach. Digital literacy initiatives, while maintaining both digital and in-person enrollment options, can expand care to a wider population.

Health equity

Youth Advisory Boards with Emerging Adult Participants: Insights from Two Studies Giovanna Rafanello\* Giovanna Rafanello, Elena Maker Castro, Frankie Osso, Omisha Sangani, Angelica Vega, Cristina Zavala, Alison K. Cohen, Lindsay T. Hoyt,

Youth Advisory Boards (YAB) engage target populations and ensure culturally responsive methods through youth feedback. Yet, they are underused. Under 1% of child and adolescent health studies in 2019 reported YAB involvement (Sellars et al., 2020). This gap is greater in emerging adults (EA), a key population for health research as they face transitions in education, employment, and socioeconomic status that shape long-term health. We draw on YABs in two studies: Economic and Educational Contributors to EA Cardiometabolic and Oral Health (3E) and Critical Consciousness and Wellbeing (C-Well). This project aims to 1) outline the process of establishing a YAB and 2) demonstrate how YABs that reflect study populations enhance health equity research.

The 3E Study, a longitudinal cohort of diverse EA undergraduates from two Hispanic-serving institutions, created a YAB (3E-AB) to merge scientific knowledge with lived experience. The 3E-AB meets monthly, facilitated by near-peer research assistants. Members receive a \$250 stipend and optional mentorship. Applications rose from 10 in year one to 98 in year two. Seven members contribute meaningfully, forming a 3E Study Club and aiding study newsletters.

The C-Well Study recruited five advisory members of diverse identities who were longitudinal research participants in a national cohort of EA college students. The YAB contributed to developing a participatory interview protocol, recruitment, qualitative codebook development, and thematic analysis. Members were paid \$50 per meeting for up to \$250. The C-Well YAB enriched our understanding of how EAs' civic participation relates to well-being (Maker Castro et al., 2024).

The 3E-AB led strategies to recruit hard-to-reach and underserved undergraduates. The C-Well YAB helped articulate relationships between EAs' change-making efforts and their mental health. Our case studies highlight how YABs engaging EAs strengthen scientific rigor and inform solutions to health equity research.

# **Health systems**

A Scoping Review of Anchor Hospitals in the United States Natalie Narcelles\* Cory Cronin, Kelly Choyke, Cheyenne Fenstemaker, Hannah Magold, Nita Reddy, Anne Mathew, Kendra Minichello, Berkeley Franz, Brian Gran,

Hospitals are increasingly being studied for their role as anchor institutions, defined by Koh (2020) as place-based organizations that invest in their communities as a way of doing business. This review aims to categorize and present how the anchor activities of hospitals are understood in contemporary literature, regardless of the use of anchor terminology, to better understand how hospitals impact their communities.

We conducted a literature search across four academic databases (i.e., PubMed, SCOPUS, CINAHL, SocINDEX) guided by PRISMA-ScR criteria. The research question deployed was: What is the scope of the literature available on hospitals' anchoring efforts as it pertains to outreach and engagement and population health efforts? As such, the principle concept of this scoping review (Peters et al. 2020) is the breadth of the research on hospitals as anchor institutions.

We included 169 English language articles published after 1980. We classified the included studies into 4 sample types (Anchor Literature with Anchor Terminology, Anchor Literature with no Anchor Terminology, Literature Examples of Hospitals as Anchor Institutions, and Anchor Policy/Strategy) and 2 article types (Peer-Reviewed (n=64, 38%), Non-Peer Reviewed (n=105, 62%)). It was most common that articles fell under the "examples" type. Further assessed was the prevalence of 7 thematic categories within each type: Financial Impact (n=103 61%), Social Determinants of Health (SDOH) (n=114 67%), Community Engagement (n=85 50%), Partnership (n=75 44%), Strategy (n=27 16%), Direct Patient Care (n=82 49%), and Advocacy (n=8 5%).

Findings indicate that anchor concepts are prevalent in literature surrounding hospitals; however, this typically occurs through the characterization of the roles hospitals play rather than through the explicit use of anchor terminology. Additionally, these discussions are more frequently found in industry journals rather than in peer-reviewed articles within academic journals.

# Infants/children/youth

Size and Determinants of the Health Advantage of Military Affiliation among Infants in the United States Christine Percheski\* Christine Percheski, Jess Meyer, M. Evangeline Lopoo,

Previous research has found that infants born to military-affiliated families (identified as having their birth paid for by Tricare or Champus) from 1995 to 2005 were less likely to be born preterm or die in infancy (Lundquist and colleagues 2014). In this project, we analyze more recent birth data to identify: 1) the current size of this military-affiliated health advantage as proxied by preterm birth, birth weight, APGAR scores, and NICU hospitalization; and 2) the relative contributions of compositional differences (in mother and father demographic and health characteristics) versus health care utilization and pregnancy and birth experiences. We use natality data from Vital Statistics for births in the United States from 2017 through 2023. Our sample includes all births in the U.S. during these years to U.S.-born mothers age 20 or older at the birth with valid data on infant health outcomes (n = 18,733,790). In our preliminary results, we find that infants born to military families have a higher mean birthweight, are less likely to have a low birthweight, are less likely to be hospitalized in the NICU, and are less likely to be born preterm. There are no meaningful differences in APGAR scores. We find that differences in NICU admissions between infants born to military families versus non-military families are completely explained by observed mother, father, pregnancy, and health care characteristics. In contrast, differences in birthweight and preterm births are not fully accounted for by measured compositional characteristics, pregnancy experiences, or health care experiences. Our findings suggest that the social and material supports experienced by military families may be contributing to positive health outcomes for infants.

# Infants/children/youth

Maternal and Pediatric RSV Vaccination Acceptance in the US During the 2023-2024 RSV Season Comfort Z. Olorunsaiye\* Comfort Z. Olorunsaiye, Dejenaba Gordon, Khadijat Adeleye, Hannah M. Degge, Joanna Okusaga,

# Objectives

Maternal and pediatric respiratory syncytial virus (RSV) vaccination is effective for preventing pediatric RSV illness. However, vaccine acceptance in the 2023-2024 RSV season was very low. This study aimed to assess the associations between awareness of RSV vaccination and vaccine acceptance by infants and pregnant women in the US.

#### Methods

A cross-sectional, self-administered survey was implemented in June 2024 in the US women. Eligibility criteria included identification as a woman, pregnant between June 2023 and June 2024 or parenting a child <8 months old during the same period. The main exposure was RSV awareness. The respective outcomes were maternal and pediatric RSV vaccine acceptance. Preliminary analysis of the data included descriptive and inferential statistics. The Arcadia University IRB approved the study.

#### Results

In preliminary analysis, among 650 women who were pregnant or parenting an infant less than 8 months old between June 2023 and June 2024, the mean participant age was 28.1 ±6 years; 39.6% completed high school or less; 48% reported a household income <\$40,000; about 36% identified as Black/African American; and 28% identified as Hispanic. Six-in-ten (61.2%) of the women were aware of the RSV vaccination recommendations. Overall, 35% of women had received the maternal RSV vaccine. Of 230 infants, 55% had received the pediatric vaccination. Factors correlated with pediatric and maternal RSV acceptance (p<0.05), respectively, included awareness, maternal race, ethnicity, education, income, and insurance. In logistic regression, adjusted for potential confounding variables, maternal RSV awareness was associated with maternal and pediatric vaccine acceptance (odds ratio (OR)=2.19, 95% confidence interval (CI)=1.09-7.24 and OR=1.65, 95% CI=1.02-15.22, respectively).

# Conclusion

Programs to strengthen maternal and pediatric RSV vaccination must include campaigns to raise awareness about RSV illness and the benefits of vaccination in preventing severe illness in infants.

# institutional factors supporting community-engaged research

Barriers to tenure and promotion for public health scholars collaborating with community partners: interview pilot study findings irene yen\* irene yen, Brenda Castañeda-Castañeda, Leslie Dubbin, Marizen Ramirez, Nael Abu-Ghazaleh,

University tenure and promotion standards feature research or scholarship, teaching, and service categories used to assess faculty progress. Typically, the gold standard criteria for evaluating merit and promotion in population sciences research is the number of peer-reviewed publications in highimpact factor journals and the impact (e.g. citation counts) of peer-reviewed publications, books, or book chapters published during a review period. Community-engaged (CE) research, which includes Community-Based Participatory Research, a hallmark of population science, may not generate academic products that meet traditional merit and promotion standards and present attendant challenges for assessing the impact of these products. CE relies on working partnerships with community organizations, informal resident networks, and/or government organizations whose interests and expectations often generate non-academic products that have high impact for communities of interest. Seeking to understand the experiences of CE researchers, we interviewed 18 faculty in public policy, education, and public health at different career stages working at two public universities for their reflections on how community-engaged scholarship was recognized and valued during the merit and promotion process. Interviews were recorded through Zoom and transcribed with Otter.ai. Key themes emerged that highlight the challenges community-engaged scholars face in securing tenure and promotion: 1) campus focus on traditional scholarly products they are the "coin of the realm"; 2) campus undervalues CE research and its community and policy impacts; 3) because of the perceived lack of support, senior faculty discourage early career faculty from engaging in CE projects until reaching full professor status; 4) a recognition that CE work involves substantial amounts of unaccounted labor and a lack of transparent metrics in the merit and promotion process. Interview participants also provided approaches campuses could take to address these challenges including: 1) establish a campus-community engagement office; 2) update academic personnel standards language to feature more common CE products and the labor associated with CE work; and 3) devise quantitative metrics that would account for unseen labor.

# **Interventions/Programs**

Implementation and impact of an adult Community Health Worker program at a large public hospital system in New York City Lorraine Kwok\* Lorraine Kwok, Renata Howland, Dawn Walter, Rachel Massar, Kayla M. Fennelly, Arya Singh, Michelle Chau, Jennifer Zanowiak, Jenna Lupi, Yuan Jin Tan, Jenifer Clapp, John Billings, Alessandra Calvo-Friedman, Nichola J. Davis, Nadia Islam, Carolyn A. Berry,

Increasingly, primary care clinics are using Community Health Workers (CHWs) as a promising approach to reduce barriers to health, address social needs, and improve engagement in care. New York City Health + Hospitals (NYC H+H), the nation's largest public hospital system, established a CHW program across 17 adult primary care clinics to support participants with their health goals, social needs, and clinical navigation. We conducted a mixed methods evaluation of the program, including: 1) 59 key informant interviews with healthcare providers, clinic staff, and program leadership to identify implementation facilitators and barriers; 2) 274 pre/post participant surveys to assess domains including self-reported health, healthcare and medication management self-efficacy, social needs, and program satisfaction; 3) 19 interviews with a subset of participants to explore their experience with the program; and 4) pre- and post-enrollment examination of utilization, A1C levels, and blood pressure values using electronic health data for 3568 participants enrolled from 1/2022 to 6/2023. Interviews revealed effective program implementation with some variability due to individual clinic conditions. Participants reported improvement in self-reported health and medication management self-efficacy as well as positive experiences with the clinic and CHW program. Quantitative analysis showed significant post-enrollment decreases in the proportion of participants with any emergency department visit (-6.1%, p<0.01) and any inpatient visit (-4.9%, p<0.01). We also found decreases in the proportion of participants with uncontrolled diabetes (-9.0%, p<0.01) and uncontrolled hypertension (-7.0%, p<0.01). Understanding the implementation and impact of an Adult CHW program at a hospital system such as NYC H+H will inform the development and scale-up of similar interventions.

# **Interventions/Programs**

Micro-costing evaluation of high-risk teen driving intervention study Rachel Mason\* Rachel Mason, Eric Seiber, Dominique Rose, Priyanka Sridharan, Cindy Sieck, Lindsay Sullivan, Ginger Yang,

#### Introduction

Motor vehicle collisions (MVCs) are the leading cause of death among teens in the United States. Teen drivers who have committed a traffic violation are at an even greater risk of MVC-related injuries and deaths as compared to their counterparts. Our intervention study, Steering Teens Safe (STS+), which translates evidence-based parent-engagement intervention methods to an understudied but high-risk population of teen drivers with a traffic violation, seeks to improve safe teen driving practices with increased parent engagement. We used microcosting to evaluate the costs of expert led vs peer led STS+ implementation to (1) estimate end of project cost effectiveness and (2) inform future efforts to implement STS+ in programmatic applications.

#### **Methods**

Monthly purchases and time associated with study activities were entered via REDCap for the two intervention sites (Nationwide Children's Hospital and University of Iowa). Estimates of hourly salaries with fringe benefits for study staff were used to operationalize time-costs (e.g., travel to court for recruitment, intervention-related meetings, development of materials, etc.)

#### **Results**

The total cost estimate for STS+'s implementation between August 2022 and December 2024 is \$199,365.51, with the highest expense spend on travel time (\$23,726.40). Start-up cost estimates, comprised of adapting peer training and hiring an expert trainer, were estimated to be \$1881.22. Expert training, comprised of initial sessions, booster sessions, and equipment purchases, were estimated to be \$74,099.41. Peer training, which included recruitment, enrollment, and delivery of sessions and follow-ups, as well as equipment purchases were estimated to be \$6,838.80. Participant support, including recruitment, enrollment, equipment installation/uninstallation, and travel time, amounted to \$116,546.08.

#### Discussion

Findings reveal that the cost of expert training substantially exceed that of the peer-training arm. Future analyses after completion of the clinical trial will determine the relative cost-effectiveness of Expert Led versus Peer Led STS+. Limitations of the study include time estimates were derived from self-report and general underestimates of time due to the team having already conducted three prior studies on STS.

# **Interventions/Programs**

Mixed methods evaluation of an early childhood CHW program in a large public hospital system in New York City Lorraine Kwok\* Rachel Massar, Renata Howland, Katherine Piwnica-Worms, Nithya Narayanan, Kayla Fennelly, Arya Singh, Ariel Charney, Shauntee Henry, John Billings, Carolyn Berry,

In 2021, NYC Health + Hospitals (H+H), the largest public hospital system in the US, launched an Early Childhood Community Health Worker (EC CHW) program in 16 pediatric primary care facilities with a focus on increasing access to Early Intervention (EI) and addressing social needs. We conducted a mixed methods evaluation to assess implementation and program outcomes. Key informant interviews were conducted with program staff at 5 facilities, Central Office leadership, and caregivers and analyzed using rapid qualitative methods. Pre/post caregiver surveys (baseline, 3 months) assessed self-reported health, parenting self-efficacy, engagement with child's healthcare, social needs, and clinic/program satisfaction. We assessed impact on mother-child dyads by linking program participants with NYS Medicaid claims (n=7,516) and selected a comparison group of children receiving care at similar NYC safety net providers (n=18,158) using matching methods based on child and maternal characteristics. We estimated the effect of the EC CHW program on any use of EI evaluation and services in the 12-months following program enrollment using logistic regression models. Qualitative interviews revealed key facilitators and barriers to effective program implementation. Caregivers reported significant increases in engagement with their children's healthcare and parenting self-efficacy, as well as high satisfaction with their clinic/EC CHW program. Medicaid claims analyses found children in the EC CHW program were 15.7 percentage points (pp) more likely to have an EI evaluation compared to children in the comparison group (21.4% vs. 5.7%). EC CHW children were also 9.7 pp more likely to receive EI services compared to children in the comparison group (15.2% vs. 5.5%). Results from our evaluation of the EC CHW program at H+H can inform program development, implementation, expansion, and sustainability of similar CHW programs across the country.

LGBTQ+

Adapting Menstrual Practice Needs Scale (MPNS-36) for Transgender and Non-Binary People in India: A Cross-Cultural Validation Study Priyanka Dubey\* Priyanka Dubey, Shaon Lahiri, Rima Afifi,

**Significance:** Transgender and nonbinary (TNB) individuals often have to manage menstrual health and hygiene (MHH) in a social context where their gender may not be recognized which complicates MHH while navigating gender identity. Although there is a limited amount of work in this area, it is insufficient to make informed decisions. This adaptation process is critical to understand the menstrual health needs of TNB people in India, which could benefit around half a million people. Activists suggest that the actual number is higher than the official estimates. The main goal of this study was to prioritize the voices of TNB individuals through the adaptation of the menstrual practice needs scale (MPNS-36) and create a contextually valid scale that is applicable to TNB people in India.

**Methods:** We used a multi-method approach that involved systematic translation, adaptation based on findings from systematic literature review, a qualitative study, and interviews with local and global experts on MHH and measurement including community members.

**Findings:** We made significant changes to the MPNS-36 scale: 1. modified words to ensure appropriate language and context, 2. added new items to evaluate the menstrual needs of the TNB people, and 3. developed and included a new scale to assess menstruation-related dysphoria among TNB people. The adaptation of the MPNS-36 scale does not change the core purpose of the scale which was managing physical aspects of menstrual bleeding. However, the addition of the menstruation-related dysphoria scale will make the menstrual needs assessment more holistic for the TNB people.

**Conclusion:** The adapted MPNS-36 scale would help create a more inclusive and supportive environment for TNB people, ensuring they can access the necessary resources for their menstrual health, hygiene and ultimately overall wellbeing. By recognizing and addressing their menstrual health needs, we can work towards achieving greater equity and inclusivity for all individuals.

LGBTQ+

The impact of COVID-19 on healthcare access for gender diverse adults: A Qualitative study Jay Snyder\* Ellesse-Roselee Akre, Saniya Sahasrabudhe,

# Background

Transgender and gender diverse (TGD) persons experience unique healthcare needs that are partially addressed through gender-affirming care, which significantly benefit their mental health and overall well-being. The COVID-19 pandemic exacerbated existing structural barriers to healthcare access for TGD people as many services were deprioritized despite their importance.

# Objective

This study examines changes in access to healthcare and delays in accessing healthcare by TGD populations across the United States during the COVID-19 pandemic.

#### Methods

An online Qualtrics survey was administered to TGD adults (18+) residing in the United States between September 2022 and March 2023. Participants were recruited through social media and snowball sampling methods. The study analysed response to the open ended question, "How did COVID-19 impact your experience accessing health care?" using inductive coding and modified grounded theory to analyse the participants responses (n=87).

#### Results

Five main themes emerged from the analysis: 1) Shift to telehealth, 2)Availability and access and why those were limited,3)Affordability, 4)Delays in gender-affirming care, and 5)Delays in accessing other healthcare needs. The first two themes were most frequently addressed by participants.

#### Conclusion

TGD individuals face significant structural barriers in accessing healthcare. These challenges were intensified during the COVID-19 pandemic and extended beyond gender-affirming care. The findings highlight the need to integrate gender-affirming care into broader healthcare systems rather than treating it in isolation, ensuring comprehensive and accessible healthcare for TGD populations.

LGBTQ+

Examining Differences in Self-Reported Cardiovascular Disease History among LGBTQ+ subgroups: A secondary data analysis using 2018-2023 Behavioral Risk Factor Surveillance Survey Jane Murphy\* Jane Murphy,

Introduction: The purpose of this analysis was to examine how differences in cardiovascular disease (CVD) history vary along sexual orientation and gender identity. Even though research has found there is often an intersection between diverse sexual orientations and gender identities, these groups are often treated as either uniform (the LGBTQ+ community as a whole) or as two separate groups (either diverse sexual orientation or gender identity), particularly regarding CVD history.

Methods: This secondary data analysis used valid responses from adults who completed the Sexual Orientation and Gender Identity (SOGI) module and CVD history (heart attack, coronary artery disease, and stroke) from the 2018-2023 cycles of the Behavioral Risk Factor Surveillance Survey. CVD history was examined using Chi-Square analyses first by four-level SOGI subgroups (Transgender Straight, Transgender Diverse Sexual Orientation, Cisgender Straight, and Cisgender Diverse Sexual Orientation) and then by 12-level SOGI subgroups at the intersection of sexual orientation (diverse sexual orientation or straight) and gender identity (Transgender Women, Transgender Men, Gender Nonconforming Assigned Female at Birth, Gender Nonconforming Assigned Male at Birth, Cisgender Women, and Cisgender Men).

Results: 1,314,710 respondents from the 2018-2023 BRFSS cycles were examined. Chi-square analyses found statistically significant differences in reported CVD history among the four-level SOGI category as well as in the more detailed 12-level SOGI category. For each gender identity group, those with diverse sexual orientations reported lower prevalence of CVD history when compared to their straight counterparts.

Discussion: These results highlight significant differences in reported CVD history among SOGI categories. Further research is needed to better understand the cause(s) of these health disparities so that effective interventions can be implemented to reduce these outcomes among SOGI subgroups.

LGBTQ+

# Geographies Of Transgender Minority Stress: The Role Of US States In Shaping Transgender Mental Health Zoey Rawson\* Zoey Rawson,

The need to address stigma within social institutions is evident in the high rates of psychological distress within the transgender community. My research addresses the question: How do societal attitudes within states influence health disparity between transgender and cisgender adults? I used data from the TransPop Study along with data on state public support for anti-trans bathrooms to understand the impact of societal attitudes on transgender and cisgender mental distress. Here, attitudinal context referred to whether someone lived in a state within in the bottom third (tolerant), middle third (average), or top third (intolerant) of states in relation to public support for anti-trans bathroom bills. Transgender adults had worse mental health outcomes regardless of the general attitudinal context. The disparity in mental distress was equally as wide among tolerant and intolerant contexts. These findings suggest that tolerant contexts may lack the readiness and resources to tackle the needs of the most vulnerable transgender adults among them. Quantitative research may want to confirm whether transgender adults facing extreme discrimination do better in intolerant contexts. Qualitative research may want to explore the compensatory strategies used within communities in less tolerant contexts. Further, more refined models and holistic measures of societal attitudes are needed.

LGBTQ+

Viral Shadows: The Afterlife of the HIV/AIDS Crisis on Queer and Trans Health Tyler Harvey\* Tyler Harvey,

Queer and trans individuals experience a range of social and health injustices compared to their cisgender, heterosexual counterparts in the United States (US). Many theories and models (i.e., minority stress theory) posit how gueer and trans individuals are exposed to unique social stressors that harm their health and propose how individual factors (i.e., resilience) can be harnessed to combat such deleterious effects. Yet, there is a gap in theoretical work that explores how historical violence against queer and trans people shapes the structures and systems in which they exist within today and how the legacy of such violence influences their health. Using Saidiya Hartman's conceptualization of the "afterlife of slavery" as a guiding framework, I posit modern-day queer and trans health in the "afterlife of the HIV/AIDS crisis." Using primary data and content analysis across disciplines, I attempt to understand how normative logics around gender and sexuality created tactics of oppression during the HIV/AIDS crisis in the 1980s and 1990s that continue to inform the contemporary health of gueer and trans individuals. Here, I report dominant themes, including 1) the role of pathologization and stigma towards gueerness and transness, 2) the use of rhetoric by the media, politicians, and the scientific community to demoralize queer and trans bodies, and 3) the impact of homophobia and transphobia being codified into laws and policies to criminalize gueerness and transness. Based on these findings, the current climate surrounding queer and trans health in the US-ranging from population health inequities to legislative attacks on health care-must be understood within the historical context of the HIV/AIDS crisis. Creating a world where gueer and trans people can flourish in their queerness and transness requires contextualizing the history and legacy that has sought to erase and harm them, with the intent of re(contextualizing) their beings and health.

# Life-course/developmental

Early Life Adversity and Adult Substance Misuse: The Moderating Role of Adult Residential Characteristics Blakelee Kemp\* Blakelee Kemp, Alex Mason, Promise Emmanuel,

Childhood adversity (e.g., socioeconomic disadvantage, child abuse) leads to lasting biopsychosocial changes that considerably increase the risk of later substance misuse, even into midlife and beyond. This is a concern because substance misuse among midlife and older adults is a growing public health concern. However, there are significant gaps in knowledge about the multiple contextual factors that diminish or heighten the risk of substance misuse after experiencing adversity decades earlier. Modifiable features of the places in which people live and age can dramatically shape, for better or worse, the availability of resources, exposure to risks, and responses to early life adverse experiences. This study links data from the Health and Retirement Study to examine the extent to which adult residential characteristics (e.g., alcohol and tobacco outlets, neighborhood socioeconomic status) intensify or diminish associations of childhood adversity with alcohol and tobacco misuse among midlife and older adults. Results indicate that residential social cohesion and the number of residential social ties increase the predicted probability of heavy episodic drinking, particularly among those who had no socioeconomic disadvantage during childhood. These findings are consistent with reports showing that alcohol misuse tends to be a social behavior and is more prevalent among those in a higher socioeconomic standing. Importantly, this study extends prior evidence of the link between socioeconomic status and alcohol misuse by demonstrating a similar pattern with childhood socioeconomic status and finding that this association is contingent upon adult social residential characteristics. This study reinforces the value of a contextual approach to the study of substance misuse, considering how early life conditions and adult residential contexts jointly contribute to mid and later life substance misuse.

# Life-course/developmental

Pathways of Resilience: Countering Deficit Narratives in Examining Childhood Protective Factors and Healthy Aging Among Black Adults Mark Berg\* Kendall Riley, Kendall Riley, Yi-Fang Lu,

A wealth of research documents the detrimental effects of adverse childhood experiences (ACEs) on health, yet comparatively few studies explore why some children thrive in adulthood despite their toxic early life experiences. This imbalance reflects the dominance of a deficit model in health research, particularly when studying Black individuals who disproportionately experience high levels of stressors across the lifespan. Supportive resources available to youth may protect against early life stressors, promoting healthier aging through several "pathways of resilience." Using prospective longitudinal data from 436 Black adults (mean age = 29 years, SD = 0.75) collected in 2015-2016, we examine how ACE exposure and protective factors shape cardiovascular health in adulthood. Data collected from 1997-2000 is used to examine ACEs (e.g., food insecurity) that participants and their primary caregivers self-reported when participants were 10-12 years old. We use prospective self-reports from participants to examine their access to supportive resources during childhood and adolescence (10-17 years) across three social contexts: (1) neighborhood (e.g., neighborhood cohesion), (2) peer, mentor, and school (e.g., belonging in school), and (3) family contexts (e.g., supportive relationships with parents). Health-related covariates (e.g., education, smoking) are included as well. We will employ confirmatory factor analyses, mediated moderation models, and structural equation models to test direct and indirect effects between cardiovascular disease risk, ACEs, and resiliency pathways. We will then test moderation and mediation analyses to test the extent to which positive factors protect against the health consequences of ACEs for Black adults. Preliminary results establish associations between early life experiences with cardiovascular health. The findings will provide greater insight into how we can promote healthier aging and a longer healthspan, beginning in childhood.

# Life-course/developmental

Social mobility and health over the life course: Using Integrative Data Analysis to uncover self-rated health trajectories by social mobility status over the life course. Ekaterina Baldina\* Ekaterina Baldina.

This study aims to understand the association of life-course intergenerational social mobility with self-rated health in the United States. Existing research highlights that not only individual's education but also parental education and intergenerational mobility contribute to health benefits. For instance, upwardly mobile and stable high-level socioeconomic status individuals have higher cognitive function (Shi et al. 2024) and lower mortality risks (Tran et al. 2024). The positive effects of upward mobility also extend to the adjacent generations: parents of upwardly mobile children had higher levels of well-being (Wang 2024), and children of upwardly mobile mothers were more likely to have higher birth weights (Kappelman et al. 2025). Conversely, downwardly mobile individuals are found to have reduced brain volume (Liu et al. 2024), higher levels of psychological distress (Vanzella-Yang and Veenstra 2024), and greater loneliness (Mugiyama, Kwon and Tabuchi 2024). However, some evidence points out that upward mobility might be detrimental to some dimensions of health. For example, upward mobility in low-opportunity contexts produces high distress, chronic conditions, and the adoption of unhealthy behaviors, such as alcohol use (Zang and Tian 2024).

At what point in life does social mobility direction bring benefits or disadvantages to health? In this project, I specify and test a novel model exploring the differences in relationships between social mobility and health at different life course stages—such as young adulthood, middle age, and older adulthood. Additionally, I employ a Mobility Contrast Model to estimate a heterogeneous effect of intergenerational social mobility on health. This method is designed to assess the mobility effects of different directions and magnitudes, which was impossible with other models (Luo 2022)...

# Life-course/developmental

Adult psychological distress and cannabis use: The role of childhood adversity Celina Morales\* Celina Morales, Annie Ro,

**Background**: Adult mental stress has been associated with cannabis use. However, the confounding impact of adverse childhood experiences (ACEs) on this relationship still needs to be comprehensively assessed by different adult age groups. Childhood adversity can have a long-lasting impact on mental health and substance use behaviors, including cannabis use. This study investigates whether ACEs attenuate the association between past 30-day psychological distress and cannabis use frequency in different adult age groups.

**Methods**: Data from the 2021, 2022, and 2023 Adult California Health Interview Survey (N=67,548) were used. The Kessler Psychological Distress Scale was used to measure past 30-day distress. Past 30-day cannabis use was measured as 0 days, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, 30 days or more. Adverse childhood experiences counts were 0, 1, 2, 3, and 4+. Age was grouped as 18-29, 30-39, 40-59, and 60+. Stepwise ordinal logistic regression models tested the hypothesized relationships. All analyses were survey-weighted.

**Results**: In our analytic sample, 15% had used cannabis in the past 30 days, 8% reported past 30-day psychological distress, 33% had 0 ACEs, 21% had 1 ACE, 15% had 2 ACEs, 12% had 3 ACEs, and 20% had 4+ ACEs. Among adults aged 18-29 (AOR=1.61; 95% CI: 1.16, 2.23, p<0.01) and 30-39 (AOR=1.83; 95% CI: 1.30, 2.57; p<0.01), ACEs the distress-cannabis relationship was positive and significant but was partially attenuated after accounting for ACEs. ACEs completely attenuated the relationship among adults aged 40 and older. After adding ACEs to the model, psychological distress was no longer positively associated with cannabis use among adults 40-59 (p=0.08) and 60+ (p=0.09)

**Conclusion**: This study found that ACEs attenuate associations between psychological distress and cannabis use, but the extent varies by age group. Among younger adults, adult distress plays a critical role in cannabis use, over and above ACEs. However, among older adults, child adversity has a greater impact on cannabis use than past month distress.

## Mental health/function

Examining social and behavioral risk factors for postpartum violence using longitudinal, population-based hospital data Shaina Sta. Cruz\* Shaina Sta. Cruz, Sidra Goldman-Mellor, Alison Gemmill, Claire Margerison,

Violence against pregnant and postpartum women is a major public health problem worldwide. Identifying critical risk factors can better inform policies and guidelines on clinical prevention, intervention, and care, and ultimately, reduce the risk of violence for pregnant and postpartum women. Most studies on predictors of violence have been cross-sectional or based on small sample sizes or self-report data, all of which impede more representative analyses of risk factors. Utilizing more comprehensive, longitudinal, population-representative datasets would help to identify and describe the populations most at-risk for violence. In this study, we used longitudinally-linked, allpayer statewide data to test risk factors for violence victimization-related ED visits during the first year postpartum over a 11-year period (2010-2021) in California. The sample comprised all women with a live-birth hospital delivery in each year from 2010-2020 (~3 million). Annual cohorts of women were followed for 12 months after their delivery hospitalizations to identify subsequent nonfatal ED visits for violent injury (defined using ICD-9/10-CM codes). Analyses included generalized linear models to test predictors, including comorbid mental health diagnoses, hospitalbased care utilization, and zip code-level sociodemographic factors. Findings highlight a doseresponse relationship between emergency department presentations and violence, as well as between mental health diagnoses and violence. Additionally, incidence of violent injury increased especially sharply in the presence of mood disorders, anxiety disorders, alcohol disorders, and psychotic disorders. Furthermore, excess risk varied by sociodemographic factors, namely median household income and educational attainment. Next steps are to examine the role of the healthcare system and social services in reducing pregnancy-associated violence risk. Violence against women is a multi-faceted issue that requires multi-level health equity-focused solutions and improved behavioral health response. Healthcare professionals must consider how mental illness places women at higher risk and push to integrate behavioral health processes and support services in emergency departments, hospitals, and primary care.

## Mental health/function

Shifting Co-occurring Digital Media Use Patterns and Their Impact on Adolescent Mental Health: A Longitudinal Analysis Yunyu Xiao\* Yunyu Xiao, Yuan Meng, Timothy Brown, Katherine Keyes, J. John Mann,

Background: This study investigates the associations between longitudinal digital media use, addiction-like behaviors on various platforms, and youth mental health outcomes, including suicidal ideation and attempts.

Methods: Utilizing data from the Adolescent Brain Cognitive Development (ABCD) study, participants reported daily screen time across different platforms and addiction-like behaviors. Mental health was assessed using the Child Behavior Checklist (CBCL) and KSADS-COMP for suicidal ideation and attempts.

Results: Three distinct clusters of digital media use were identified among 11,189 participants. Cluster 1 exhibited high screen time and addiction-like behaviors across all platforms, Cluster 2 showed lower levels of use, and Cluster 3 demonstrated increased video game use in Year 4. Significant increases in digital media use were observed over time. Cluster 1 participants showed significantly higher CBCL internalizing symptoms (Cohen's d, 0.29; 95% CI, 0.2-0.38; P<.001), externalizing behaviors (0.18; 95% CI, 0.09-0.28; P<.001), and were more likely to have attempted suicide (OR 2.67; 95% CI, 1.72-4.13; P<.001) compared to Cluster 2.

Conclusions: Addiction-like behaviors on digital platforms, particularly video games and social media, are associated with poorer mental health outcomes and increased suicide attempt risk in adolescents. These findings highlight the need for targeted interventions and policies to address problematic digital media use among youth.

# Mental health/function

The Unequal Toll: Identifying Mental Health Disparities in U.S. Adults During the COVID-19 Pandemic CeRon Ford\* CeRon Ford,

**Background**: The COVID-19 pandemic and the accompanying policy responses impacted mental health outcomes for all U.S. adults. Depressive symptoms among all U.S. adults increased before and throughout the onset of the pandemic. Less is known about how subgroups based on race/ethnicity, sex, and sexual identity experienced depressive symptoms in the time surrounding the pandemic.

**Objective**: Apply an intersectional approach to identify disparities in mental health outcomes before and after the onset of the pandemic.

**Methods**: Analyses were conducted using the 2019 and 2022 National Health Interview Survey. Chisquare tests were used to characterize the study sample and logistic regression models were used to predict outcomes in 2019 and 2022.

**Results**: There was an increase in mild to severe depressive symptoms with differences in magnitude by group in 2022 compared to 2019. Female racial/ethnic minoritized sexual minorities (FMSM) (43.0% in 2019 vs. 53.7% in 2022, p<0.001) displayed the largest percent change in mild to severe depressive symptoms followed by male white sexual minorities (27.5% in 2019 vs. 35.4% in 2022, p<0.001), male racial/ethnic minoritized sexual minorities (31.8% in 2019 vs. 37.1% in 2022, p<0.001). In 2019, female white sexual minorities were more likely to report mild to severe depressive symptoms (OR = 4.41, CI = 3.36-5.78, p<0.000) than male white heterosexuals (MWHS). In 2022, FMSM were more likely to report depressive symptoms (OR = 4.81, CI = 3.42-6.75, p<0.000) than MWHS.

**Conclusion**: While all subgroups experienced an increase in mild to severe depressive symptoms after the onset of the pandemic, subgroups with multiple marginalized identities are more vulnerable to poorer mental health outcomes. Future analyses will use logistic regression modeling to test for moderation while adjusting for socioeconomic factors and the Hausman-McFadden test to compare the estimated coefficient vectors by year.

# Methodological approaches to studying public health

SocialsVoice: A New Youth Participatory Action Research Protocol for the Study of Social Media and Mental Health Melissa DuPont-Reyes\* Melissa DuPont-Reyes, Alice Villatoro, Victoria Mello, Lu Tang,

Background: Studies show a youth mental health crisis coinciding with increased social media (SM) use. To support community-engaged research about the relationship between SM and mental health, we designed the SocialsVoice protocol that adapts the participatory method Photovoice. The proposed presentation will discuss how SocialsVoice used a randomized design to examine how youth engage with mental health content in SM. Method: Youth ages 13-24 and their parents were recruited nationally from community-based Latino organizations. Youth/parents were invited to complete an eligibility contact form for researchers to provide study information, consent/assent forms, and virtual focus groups to

participants. After introductory sessions with youth/parents, youth were randomly assigned to collect SM clips that depict mental health positive or negative content. In subsequent sessions 2-4, youth defined and discussed their thematic SM clips. In session 5, youth groups co-created a video about their findings to present to all parents in session 6 (culmination). Reflection sessions 7 with youth and parents concluded the study. Pre-posttests were sent to youth and parents pre-randomization and after sessions to explore participatory effects on: SM use behaviors; mental health symptoms; stigma, self-perceptions and help-seeking; and other related factors. Results: The study enrolled 49 youth and 35 parents; of these, N=42 youth and N=30 parents attended session 1 (86%). Youth were then randomized: N=18 in the negative and N=21 in the positive theme attended a session 2-4 (80%). Results will include attendance of sessions 5-7 to occur in mid-March 2025 and process outcomes. Conclusion: SocialsVoice uses partnered research with families to co-create a SM database about mental health of real-world relevance. This study design goes beyond simple measures of time spent on SM to better understand how youth engage with mental health content in SM to inform pragmatic policy for the safety and utility of SM.

# Methodological approaches to studying public health

A Community-Based Participatory Approach to Identify Feasible and Equitable Health Policies: Adapting the Citizen Panel Method for An Under-Resourced Rural Setting Kesia Garibay\* Kesia Garibay, Denise Diaz Payán, Rose Ruiz, Irene H. Yen,

Community-based participatory strategies can help researchers and practitioners identify local health policies that are responsive and relevant to address public health concerns. We partnered with a local group of Community Health Workers (CHWs) in an under-resourced rural setting, who identified housing insecurity and culturally appropriate mental health care services as top public health priorities. We adapted a citizen panel approach presenting viable policy options that were contextually feasible (e.g. could be supported by local policymakers) and could help address the identified concerns. This modification considered the county's political environment and demographics - predominantly rural/agricultural, with a substantial immigrant population and a Latino majority of 60%. This citizen panel approach, developed by Subica and Brandon, is a community-based participatory research (CBPR) method designed to engage stakeholders and community members in tailoring research and interventions aimed to reduce health inequities. In April and August 2024, we organized two citizen panel sessions (duration: 2 hours) with CHWs from a local nonprofit organization. Our team prepared materials with three policy options to address housing insecurity and mental health service needs in the county. Selected policies had been implemented in other U.S. cities. All materials were translated into and presented in Spanish since this was the dominant or preferred language of attendees. The session began with a presentation of the policies, then CHWs were divided into smaller groups to discuss and rank which policies seemed most feasible given socio-political and resource constraints in their county. We learned a few lessons from the sessions, including that CHWs very much appreciated knowing about existing policies from other locations, wanted local officials to be aware of them. We will present other take aways from this collaborative process.

# Methodological approaches to studying public health

Engaging Patients in Qualitative Research to Advance Population Health Lizbeth Garcia\* Jacquelyn Jacobs, Lizbeth Garcia, Patricia Labellarte, Kelsey Barnick, Yasmeen Santana,

In the last decade, community engagement has gained prominence, with evidence suggesting that involving persons with lived experience can generate more culturally appropriate findings, feasible interventions, and nuanced result interpretation. In 2023, Sinai Health System, Illinois' largest private safety-net health system, launched a study to examine optimal care options for patients with diabetes, including participatory engagement with a Patient Advisory Committee (PAC). This presentation will describe methods for preparing PAC members for qualitative research, strategies to lead them through analysis, and the value of patient engagement to improve population health.

The PAC comprises six individuals 18+ living with diabetes. Members joined five 90-minute virtual meetings. Topics included focus group guide development, qualitative analysis training, and coding/theme development. Additional coding/theme development and sense-making sessions are forthcoming. We follow community-based participatory research principles by building on community strengths, centering the lived experience of persons living with diabetes, facilitating partnership between community residents and researchers, and encouraging co-learning and empowerment.

Preliminary findings highlight the value of including patients with lived experience in analysis and interpretation. This engagement builds community capacity, enhances meaningfulness of results, and improves trust in researchers. Key strategies included providing qualitative methods training, compensating participants for their time, and offering technology support. PAC members expressed a deeper understanding of research processes, building trust between researchers and community residents. They developed qualitative research skills and increased the validity of findings. Notably, PAC members identified novel codes, shared personal stories, and provided insights the research team alone could not have developed, yielding richer results.

# Methodological approaches to studying public health

Examining Adolescent Health and Wellbeing Using a Novel Multimethod and Longitudinal Community Mapping Protocol: The Promise for Youth-Driven Data to Address Health Inequities Jasmine Bigelow\* Elena Maker Castro, Madeleine Kwei, Jasmine Bigelow, Violot Landrum, Avery Welch, Natasha Chaku,

Adolescents' critical action (i.e., civic and political engagement to dismantle systemic oppressions) can support health via empowerment and purpose. Yet, rural youth, who comprise 15% of young people in the USA, live in "civic deserts," lacking opportunities for critical action. They also report worse mental and physical health outcomes than non-rural peers. Therefore, we used a novel multimethod approach combining participatory community mapping interviews followed by daily surveys and saliva sampling to examine rural youths' experiences of critical action and health during the 2024 U.S. presidential election, an opportune time to study sociopolitical activity.

Our sample includes 23 adolescents (Mage= 15.95; 63% young women, 21% gender diverse; 66% LGBTQ+; 96% White). Participants represented 10 states; the median town population was 1,570. An advisory board of five rural youth guided our process.

First, we conducted in-depth interviews using a virtual, three-step community mapping protocol. Participants identified: 1) salient community spaces (e.g., home, school) and spaces for critical actions (e.g., protesting, voting); 2) the ideological climate of these spaces; and 3) different states of well-being across these spaces. Semi-structured reflection questions followed. Next, participants completed a five-day daily diary to report critical action and community experiences each day of the 2024 election week and provided saliva samples to assess daily cortisol levels.

Through reflexive thematic analysis of interviews and network analysis of daily diary data, we will illuminate how youth's daily spaces shape links between critical action and health. Our approach highlights a community-driven and participatory method to understanding health inequities among rural youth via centering youths' contextualized lived experiences. Through co-creating health data, we can inform community-based practices that ensure rural adolescents can thrive.

### Methodological approaches to studying public health

# Enhancing Accuracy in COVID-19 Hospital Admission Estimates: Integrating Chronic Conditions into an Agent-Based Model Hilary Sandborn\* Hilary Sandborn,

Individuals with chronic conditions, such as asthma, chronic obstructive pulmonary disease (COPD), diabetes, hypertension, and obesity, are at high risk for poor health outcomes from COVID-19. Accurately accounting for the heightened risk of hospitalization for individuals with these conditions is crucial for healthcare emergency preparedness. An agent-based model called the Simulator for Infectious Disease Dynamics in North Carolina (SIDD-NC) has been developed to simulate the actions and interactions of autonomous agents during the COVID-19 pandemic. However, a limitation of SIDD-NC is its sole reliance on age-based probabilities to forecast hospital admission estimates. Thus, we employ a novel approach of assigning conditions to agents in a simulated North Carolina population, for which we consider differences in condition prevalence between both age and race groups. We then incorporate condition-specific hospitalization risk into SIDD-NC. The model outputs will be evaluated against ground truth data from the North Carolina Department of Health and Human Services (NCDHHS) for the number of new daily COVID-19 hospital admissions during the first year of the pandemic. Specifically, using both Spearman's rank correlation and Root Mean Square Error (RMSE), the model outputs will be assessed both spatially (state and region) and temporally. Public health decision-makers and health care professionals may use the model to forecast hospital admissions, aiding hospitals in preparing staff and resources for future COVID-19 surges and novel pandemics.

### Methodological approaches to studying public health

## The Co-Creation of Healthfulness Indices to Inform Population-Level Studies of the Built Environment on Health Richard Sadler\* Richard Sadler,

In population-level studies—particularly those at the state or national level—built environment metrics are often treated individually and are derived from administrative sources such as the US census. But at smaller scales, similar studies (i.e. of patient records at local health systems) can benefit from the addition of rich, local data on the built environment to better inform understanding of the drivers of health and behavior (beyond biology). Additionally, certain features may matter more to populations depending on where they live.

This talk will focus on the process of community engagement in the co-creation of multi-variable built environment indices in 5 regions across Michigan and Florida. Project motivations included healthy eating, substance use prevention, health equity, and healthy aging. We argue that this kind of engagement can serve a range of purposes. Foremost, by engaging community partners in the kinds of GIS-based layers that may be of importance to a particular research study, partners become more connected to the research process and build understanding of potential links to the built environment. Second, their perspectives on these variables create a more informed weighting process than if researchers chose the weights on their own. Third, the resulting composite maps are seen as derivatives of community engagement and are thus valued as local knowledge.

Our work leverages community partners in assigning weights to a variety of built environment variables via the analytic hierarchy process derive these composite maps that suggest areas where carrying out healthful behaviors may be relatively easier or harder, depending on the aggregate of proximity to 'good' features and distance away from 'bad' features of the environment. The goal of this work is to link these hyperlocal scores to individuals' addresses or activity spaces, to better measure each person's environmental exposures.

**Migration** 

Sociodemographic Correlates of Adverse Childhood Experiences Among Children in Non-Hispanic White, Non-Hispanic Black and Hispanic Immigrant Households Angela Campbell\* Angela Campbell, Wura Jacobs,

#### **Abstract**

**Objective**. Despite the growing immigrant population in the U.S., there is limited literature on patterns, types, and determinants of adverse childhood experiences (ACEs) experienced by children in immigrant households. This study examines sociodemographic determinants of ACEs among children in Hispanic, Non-Hispanic (NH) Black, and NH White immigrant households.

**Study Design**. The National Survey of Children's Health (2016-2023) was utilized to obtain a nationally representative sample of children (ages 0-17) in Hispanic, NH Black, and NH White immigrant households (N=32,168) for a cross-sectional study. Descriptive statistics and multinomial logistic regression models were used to examine the correlates of low ACEs (1 ACE) and high ACEs (2 or more ACEs).

**Results**. NH Black immigrant households had the highest percentage of children experiencing high ACEs. Each incremental increase in income was associated with decreased odds of high ACE exposure among NH Black immigrant children, but NH White and Hispanic immigrant children only benefited from increased income if they were in the highest income bracket (<400% of the poverty line) Having English as the primary household language was associated with increased odds of low ACE exposure among all racial/ethnic groups.

**Conclusions**. This study, one of the first, documents patterns and structural correlates of ACEs among children in Hispanic, NH Black, and NH White immigrant households. ACEs prevalence patterns mirror those in the general population, with children in NH Black immigrant households at highest risk. The impact of sociodemographic factors varies across immigrant racial/ethnic groups, pointing to the complex interplay between socio-structural factors and immigrant group-specific stressors.

**Migration** 

Workforce Development and Nonlinear Nurse Migration: A Regulatory Perspective Niamh Farrell\* Lauren Herckis, Niamh Farrell,

Non-linear, multi-national, migration is understudied, particularly the non-linear migration of nurses to the United States and other destination countries around the world. Numerous stakeholders are involved in global health worker migration infrastructure, including practitioners, regulators, and intermediaries, which include educators, migration authorities, and credentials verification and assessment bodies. Nurse migration patterns have been documented from the individual level and from the country level by international organizations like the World Health Organization (WHO) and the Organization for Economic Cooperation and Development (OECD). Exploration of nurse migration is often limited to aggregated country level statistics or individual level information. A regulatory perspective illuminates an often-overlooked part of the healthcare professional's journey: the credentials verification and assessment process. Understanding global nurse mobility through this lens adds to the conversation surrounding migration patterns, care chain delivery, and the global nursing pipeline.

This project presents results of a reanalysis of credential certification data to unravel non-linear health worker migration patterns to the United States between 2018-2024 and compare how these trends align with global migration patterns outlined by the International Organization for Migration (IOM) and nurse migration patterns described by the WHO and OECD. We report professional and demographic practitioner trends during the five-year period including where nurses are initially educated and licensed before they begin their mobility journeys and describe the types of sending, intermediary, and receiving destinations for nurses. This work will further document the landscape of health professional migration to the United States while providing the unique perspective of a migration infrastructure stakeholder that is largely absent from the literature.

**Mortality** 

Understanding Mortality at the Regional Level through Policy and Characteristics Fatima Frausto\* Fatima Frausto,

PRWORA was the first clear departure from federal uniformity to divergence due to state preferences. While welfare and labor policies initially diverged with the change in policies, other policy domains, such as immigration and criminal justice, have become increasingly polarized. Given the varying political ideologies influencing state-level policy decisions, this research examines the relationship between policy domains and mortality using the 1997-2014 National Health Interview Survey Linked Mortality File (NHIS-LMF).

This project investigates the relationships between regional policy domains and mortality outcomes by aggregating and analyzing mortality data across 4 regions. All-cause mortality will be tested across three characteristics: individual characteristics (age, gender, race/ethnicity, and education); regional contexts (share of democrats in the state house, poverty rate); and policy domains (civil rights, criminal justice, education, environment, immigration, health/welfare, labor, economic, firearms, and tobacco taxes.) Because the NHIS-LMF only provides geographical information at the regional level, the regional and policy measures are averaged by region and year. Stratified Cox regression models were calculated for the entire sample and NH White, NH Black, and Hispanic subsamples.

Preliminary results show that in the full model, more liberal civil rights domains are associated with a significantly lower risk of dying. The Hispanic and NH White subsamples had significantly lower risks of death in more liberal civil rights domains. Tobacco taxes and immigration policies were significant for the Hispanic subsample, while the NH White subsample had a significantly lower risk of dying with greater shares of Democrats in the lower state chambers. Future regressions are planned to look at regional subsamples and expand individual and regional characteristics to look at employment, wealth, and foreign-born population measures.

### Non-health institutions (business, political, education systems)

Early childhood education is associated with better midlife cognition, especially for children facing greater socioeconomic marginalization Whitney Wells\* Whitney Wells, Jillian Hebert, Chloe Eng, Catherine Duarte, Anusha Vable,

**Background:** Education is a strong predictor of cognition, but little work has evaluated the relationship between early childhood education (ECE) and cognition in midlife and beyond.

**Methods:** In National Longitudinal Survey of Youth 1979 data (n=7,129), we examined the relationship between attending preschool, Head Start, or no ECE, and midlife global cognition based on immediate and delayed word recall, serial 7 subtraction, and backwards counting. We used multivariate linear regression models to estimate overall associations, subgroups more likely eligible for Head Start, and evaluate heterogeneities by sex, race and ethnicity, and family socioeconomic status (SES).

**Results:** Overall, preschool but not Head Start was associated with better midlife cognition compared to no ECE. Among families more likely eligible for Head Start, both Head Start ( $\beta$ =0.12; 95% CI: -0.05, 0.30) and preschool ( $\beta$ =0.28; 95% CI: 0.04, 0.51) were associated with better midlife cognition. Associations varied such that Head Start was associated with significantly higher midlife cognition for Black men and those with higher family SES marginalization.

**Conclusions:** Early childhood education is associated with better cognition more than 40 years later, with larger benefits for children facing greater socioeconomic marginalization and Black men.

### Non-health institutions (business, political, education systems)

The Effects of the Interstate Highway System as a Racialized Policy on Downstream Socioeconomic Factors: A Rapid Literature Review Pamela Bonsu\* Pamela Bonsu, Angela Chen, Anjum Hajat, Deven Hamilton, Yeeli Mui, Keshia Pollack Porter, Julia Wolfson, Jessica Jones-Smith,

**Background.** The Federal-Aid Highway Act of 1956 transformed the landscape of major cities in the United States by routing highways through thriving communities of color under the pretense of "urban renewal". This practice is increasingly regarded as a mechanism of structural racism, with critics asserting that highways further entrenched patterns of residential segregation. However, empirical research examining highway development using critical race theory remains limited. We sought to identify existing scholarship on the longitudinal effects of highway development and to what extent structural racism was examined in the research.

**Methods.** We registered our protocol with PROSPERO and followed PRISMA guidelines. Eligible studies examined highways as an exposure, were published between 2007 and 2024, and had at least one socioeconomic outcome. We searched PubMed, PAIS Index, TRIS Online, and Sociological Abstracts, supplemented by snowballing, grey literature, and references from team members. Two reviewers independently assessed all references during the review process.

**Preliminary Results.** Our search returned 1,227 references, and 1,175 were excluded. We conducted a full-text review with 52 articles, yielding 23 eligible articles. Twelve were quantitative; nine were qualitative; one applied mixed methods; and one was a literature review. Studies provided a historical review, revealed the socioeconomic trajectory of regions impacted by highway development, and captured analytical methods used to model highways. While historical articles described highways as a causal driver of racialized neighborhood outcomes, most empirical studies did not explicitly address this.

**Conclusion.** The limited application of social theory in empirical studies suggests a critical gap in research that examines the impacts of highway development. The divergence between historical scholarship and empirical research indicates a greater need for inquiry that employs an interdisciplinary approach.

### Non-health institutions (business, political, education systems)

Exploring the Relationship Between Self-employment and Obesity, Across Racial and Ethnic Minority Status and Sex Using a Nationally Representative Survey Kimberly Narain\* Kimberly Narain, Daniela Markovic, Jose Escarce,

Background: The structure of work may be an underexplored contributor to the variation in the prevalence of obesity across race, ethnicity and sex. Specifically, self-employment has been associated with lower levels of obesity and obesity risk factors, but no studies have explored if there is variation in this relationship across race, ethnicity and sex. Furthermore, the conclusions that can be drawn from prior studies have been limited by the use of self-reported measures for obesity and obesity risk factors which can be subject to reporting bias. The objective of this study is to examine the association of self-employment, obesity and obesity risk factors, across racial and ethnic minority status as well as sex.

Methods: For this observational study, National Health and Nutrition Examination Survey (NHANES) data (1999-2018), a cross-sectional study design, and stratified logistic regression models were used to explore the association between self-employment, obesity and obesity risk factors, across combined racial and ethnic minority status and sex groups, among working, adults (ages 30-62). Measures of obesity and obesity risk factors (poor diet, physical inactivity, poor sleep duration and poor mental health) were dichotomized using well-established thresholds. Results: The study sample was comprised of 19,395 working adults. Among non-minority women, self-employment was negatively associated with obesity, physical inactivity, and poor sleep duration. Among minority women, self-employment was negatively associated with poor diet, physical inactivity and poor sleep duration. Among non-minority men, self-employment was negatively associated with poor diet.

Conclusions: This study suggest that there may be a relationship between self-employment obesity and obesity risk factors that varies across racial/ethnic minority status and sex; however, further research is needed to characterize this relationship.

### Non-health institutions (business, political, education systems)

The Use of Solitary Confinement and Associations with In-Custody Mortality in North Carolina State Prisons, 2021-2023 Katherine LeMasters\* Katherine LeMasters, Sara Levintow, Jennifer Lao, Erin McCauley, Craig Waleed, Zaire Cullins, Michael Behne, Lauren Brinkley-Rubinstein,

Solitary confinement, a punitive practice in which individuals are housed alone for 22-24 hours a day, is associated with increased mortality post-release. Little is known about its use following recent reforms (e.g., ending use for sub-populations) and COVID-19 challenges (e.g., increased use under the guise of public health), and its association with in-custody deaths. In partnership with Disability Rights North Carolina (NC), we investigated patterns of and associations between solitary confinement and mortality in NC state prisons.

With weekly housing data from Disability Rights NC, we created a retrospective cohort of individuals newly incarcerated in NC prisons between 2021-2023 with weekly data on housing and movements (e.g., release, admission, death). We calculated the weekly proportion experiencing solitary confinement for 2+ weeks by type (e.g., administrative control). We calculated all-cause mortality rates, and used a generalized linear model with a Poisson distribution to calculate incidence rate ratios comparing all-cause mortality between those who did and did not experience solitary.

Nearly one-quarter of 41,525 individuals in NC state prisons experienced solitary confinement. By the end of follow-up, over 6% of individuals were in solitary confinement per week, 18% had experienced solitary confinement for 2+ weeks, and the median length of stay in all types of solitary was 3+ weeks. There were 43 in-custody deaths with those experiencing solitary having twice the all-cause mortality rate of others (2.15, 95%CI: 1.14, 4.08).

Solitary confinement is common in NC prisons and is associated with elevated death rates in custody. As states implement reforms to reduce solitary, work is needed to ensure that solitary use is reduced and that length of stay aligns with United Nations standards, which require that use of solitary confinement be <15 days. There is an urgent need to document the types and duration of solitary stays to end this punitive practice.

### **Place/Communities**

Assessing Norms, Attitudes, and Readiness to Adress Child Maltreatment in a Rural Community Erin VanEnkevort\* Erin VanEnkevort, Lisa Bailey-Davis,

A Prevent Child Abuse American (PCAA) funded nation-wide telephone poll of 1,500 American adults in 2014 and 2015 assessed actual and perceived norms related to child maltreatment and its prevention. Results suggested that awareness, readiness, knowledge, and barriers are key areas of focus. Although this poll samples a small proportion of the American adult population, as we develop a clinic-to-community response to prevent child maltreatment, it is important to understand the norms, attitudes, and readiness within our community that consists of 7 counties. **The purpose of this study is to understand the attitudes and perceptions** towards child maltreatment and child maltreatment prevention within a rural Pennsylvania population to help gauge the efforts of engaging our community in preventing child maltreatment.

**Methods.** Utilizing the survey in the PCAA poll, we randomly selected patients to receive the survey to assess their attitudes and norms of the population within our catchment area so we can tailor our efforts to address the gaps and barriers within our population. 333 patients completed the survey. The majority were female and 43% indicated that they were mandatory reporters. Most were between the ages of 30-49 years.

**Results.** 90% of all respondents believed child abuse is a serious problem, 82% think it is preventable, and 98% reported willingness to act if they suspected child abuse. Interestingly, compared to those who were not mandatory reporters, those who are were more likely to believe child abuse is a problem, believe abuse is preventable, and think that most adults would not act if they suspected child abuse. When asked what actions they would take, mandatory reporters indicated being more likely to talk to the victim than those who were not mandatory reporters.

**Conclusion.** Respondents indicated awareness of child maltreatment being a problem and indicated readiness to act if abuse was suspected.

### **Place/Communities**

Alignment of quantitative variables with caregiver-identified neighborhood features salient for food purchasing decisions Félice Lê-Scherban\* Félice Lê-Scherban, Victoria Ryan, Jayla Norman, Kelly A. Courts, Zachary Fusfeld, Maggie Beverly,

**Introduction:** Neighborhood conditions may be a promising target for interventions to mitigate the effects of food insecurity on child health, but doing so requires identifying salient neighborhood features. Our objective was to identify quantitative variables corresponding to neighborhood factors caregivers of young children find important for their families' food choices. **Methods:** In 9 focus groups in English and Spanish among caregivers (n=51) of young children aged <5 years in Philadelphia, PA, participants identified features salient for their families' food choices. Focus group transcripts were coded using a start-list method. Next, an iterative process was used with input from a scientific and community advisory board to translate caregiver-identified features into quantitative, area-level variables for linkage with pediatric patient addresses from medical records. Results: Caregivers identified including 8 related to the food retail environment (e.g., stores with high-quality products). Other features included transportation, safety concerns, and structural determinants such as economic disinvestment. Quantitative variables with high alignment to the focus group features were identified for 6 features, 7 features had medium/low-alignment variables, and no aligning variables were identified for 4 features. Advisory board input included defining relevant walking distances and abandoning inadequately aligned variables. Variable sources included the National Establishments Time Series database, American Community Survey, and prior population-based surveys in the study area. Variables are being linked with addresses corresponding to 63,670 children living in the Philadelphia metro area 2007-2023. **Conclusions:** Incorporating caregiver-identified neighborhood features into the identification of quantitative variables may increase the robustness and utility of statistical analyses of neighborhood impacts on child health.

### **Place/Communities**

Gentrification and Changes in Depressive Symptoms: Longitudinal Study of Middle-Aged and Older US Adults Mark Hernandez\* Mark Hernandez, Jana Hirsch, Yvonne Michael, Leslie McClure, Suzanne Judd, Gina Lovasi,

Few studies have examined the relationship between gentrification and poor mental health longitudinally. We analyzed data from 14,168 US adults aged 45+ years at baseline in the REasons for Geographic and Racial Differences in Stroke (REGARDS) study to estimate the association between gentrification and changes in depressive symptoms. We collected repeated measures of the 4-item Center for Epidemiologic Studies Depression Scale (CESD-4) for each participant from 2003 to 2019 (mean follow-up: 10.6 years) and defined elevated depressive symptoms as a CESD-4 score ≥ 4. Gentrification status of participants' residential census tract at baseline was computed from socioeconomic and housing cost changes from 2000 to 2010 relative to other tracts within metropolitan statistical areas (MSA) and categorized as not gentrified, moderately gentrified, intensely gentrified, or ineligible to gentrify (i.e., areas already wealthy at baseline). We estimated adjusted odds ratio (aOR) associations using multi-level models clustered by participants, nested within MSA. In the full sample, 9.3% of participants reported elevated depressive symptoms at baseline. Among older participants aged 65+ years at baseline, the odds of elevated depressive symptoms increased for every additional decade since baseline in the reference group (not gentrified; aOR = 1.45, 95% CI: 0.90, 2.31). The interaction between gentrification and time since baseline suggested an association between higher gentrification intensity and faster increases in odds of elevated depressive symptoms compared to the reference group (moderate: aOR = 1.15, 95% CI: 0.81, 1.65; intense: aOR = 1.45, 95% CI: 1.04, 2.03; ineligible: aOR = 1.25, 95% CI: 0.84, 1.85). We found no significant associations among participants aged 45-64 years at baseline. Our findings suggest that living in a neighborhood that experiences intense gentrification may exacerbate the progression of late-life depressive symptoms among older US adults.

### **Place/Communities**

Associations between use of renovated urban parks and perceptions of social cohesion in diverse New York City communities Rachel Thompson\* Rachel Thompson, Justine Maffei, Katarzyna Wyka, Emma Tsui, Nevin Cohen, Terry Huang,

Social cohesion supports urban community functioning and is an important protective factor against poor mental and physical health outcomes. Neighborhoods with well-maintained green spaces have the potential to enhance community social cohesion by fostering social connections among community members. The Community Parks Initiative (CPI) is an equity-focused initiative that led to the redesign and renovation of urban parks in low-income, diverse New York City neighborhoods. We analyzed population-representative survey data (n=2000) from eight neighborhoods with recently renovated parks to assess the relationship between self-reported park use frequency in the past month and social cohesion, measured by the Sense of Community Index (SCI-2) and the Social Cohesion and Trust (SCT) subscale of the Collective Efficacy Scale. Crude and covariate-adjusted linear regression models showed that frequent park use (≥once/week) was associated with higher SCI-2 (crude  $\beta = 7.17$ , 95% CI 4.74-9.61; adjusted  $\beta = 6.18$ , 95% CI 3.82-8.54) and SCT scores (crude  $\beta = 0.175$ , 95% CI 0.097-0.253; adjusted  $\beta = 0.181$ , 95% CI 0.104-0.258). Stratified analyses showed that the strongest associations were found in individuals with household incomes of \$75,000-\$150,000 and among Non-Latino Black and Latino participants. These findings highlight the potential of high-quality urban green spaces in promoting community social wellbeing, particularly in middle-income and minority communities.

### **Place/Communities**

## Long-term Associations Between Housing, Neighborhood and Health Outcomes Among Low-income Households in the United States Olumayowa Idowu\* Olumayowa Idowu,

The social determinants of health (SDOH) are non-medical factors that influence health outcomes at the individual, community, and national levels. Research indicates that SDOH may have a greater impact on health outcomes than healthcare access or lifestyle choices, with SDOH accounting for an estimated 30-55% of health outcomes. One key determinant is the neighborhood and built environment, which includes housing and the conditions in which people are born, live, grow, play, work, and age. (US Centers for Disease Control and Prevention, 2024; World Health Organization, 2025; Office of Disease Prevention and Health Promotion, n.d.).

Housing and neighborhoods could influence health outcomes through multiple pathways. Environmental exposures, crime rates, and access to resources all shape the well-being of individuals and families. For example, children and young adults living in neighborhoods with high rates of illicit drug use may be more likely to engage in substance use due to increased exposure. A neighborhood with high crime rate could worsen health outcomes by increasing the chances of injury and death. A less walkable neighborhood could decrease the likelihood of personal exercise and increase the chances of sedentary lifestyle, and obesity. Exposure to lead or mold in housing units could increase the chances of learning difficulties, cognitive impairment, developmental delays in children, and asthma. Households in neighborhoods with limited access to healthy foods, but easy access to ultra processed foods could face increased risks of diabetes, high blood pressure, and obesity.

Where children live is strongly correlated with whether they will experience poverty in the future because of the potential long-term impacts of housing and neighborhood characteristics on children's future economic, educational, and health outcomes (Bess et al., 2023; Hock et al., 2024). It could be inferred from these findings that a poor health status of adults in low-income households due to poverty, low educational attainment, poor housing quality, poor neighborhood and environment and gene could also reduce the children's present and future income, educational attainment, economic opportunities, wealth, social support, and health outcomes, and perpetuate intergenerational cycles of poverty and poor health.

Gaylord et al, (2018) reported that children that experienced residential change or housing instability more than three times before age seven had significantly more thought-and-attention related challenges when compared with children who experienced less than three residential changes before age seven. Impacts could also include poor mental and physical health, academic underachievement, tiredness, and delayed development. With more than 30% of US households reported to be experiencing financial or rent burden due to the high cost of housing, there is evidence that the housing crisis in the United States continues to grow, and the results are widespread negative downstream impacts for individuals, families, communities, states, and the nation (United States Department of Housing and Urban Development, 2014; Jones et al, 2021).

**Policy** 

Toward an Intergenerational Environmental Justice Framework To Address Health Inequities: Implications For Local Governance in Louisville, KY Latrica Best\* Latrica Best,

The links between climate-related events and health are well documented. As climate-related events become more frequent and intense, policymakers must address the ways in which these environmental concerns further exacerbate existing health inequities, particularly within minoritized communities. Climate change not only impacts the health of individuals and communities but can also lead to poor health across generations and intergenerational perceptions of climate risk and harm. In this presentation, I pull from under-theorized scholarly discussions of intergenerational environmental justice and equity to introduce a reimagined Intergenerational Environmental Justice (IEJ) framework. IEJ is a critical, evaluative framework that draws upon core tenets of Critical Environmental Justice and Intergenerational Justice scholarship and activism to analyze local policies and governance in the context of climate change and health. An IEJ framework explores historical, current, and future cumulative and disparate impacts of environmental harms and the ways in which these harms are understood and acted upon within and across generations. Specifically, this framework considers 1) intersectional perspectives, 2) life course experiences, 3) the social, cultural and political meanings of age, time and place, and the importance of centering multiple forms of justice within local governance. I explore climate-focused, government-led health initiatives that lend themselves to and could benefit from a reimagined IEJ framework in Louisville, KY, a city that is experiencing increasingly frequent extreme weather events and whose environmental and health landscape is rooted in historical and on-going structural racism. Through this framework, I evaluate these initiatives based on their ability to articulate climate-related health concerns, their focus on key forms of justice, and their handling of potential intersectional and intergenerational issues. Lastly, I conclude by offering intersectional- and justice-oriented recommendations geared toward creating effective interventions.

**Policy** 

The impact of the Let Everyone Advance with Dignity program on police presence and engagement in predominantly racially minoritized communities in Minneapolis Tongtan Chantarat\* Tongtan Chantarat, Simone Hardeman-Jones, Ann Brearley, Lindsey Turner, Michele Allen,

Racially minoritized individuals are many times more likely to come into contact with the police compared to their white counterparts. Over-policing in neighborhoods with a high proportion of racially minoritized residents is associated with injury to individuals involved in the altercations, psychological distress, and trauma for both individuals with direct police contact and those who see or hear about police-involved incidents. Addressing over-policing in these neighborhoods is a key lever to improve population health and mitigate racial inequities.

The Let Everyone Advance with Dignity (LEAD) program is an evidence-based, collaborative, pre-booking diversion program that offers harm reduction-oriented case management to individuals with a known or presumed history of or at risk of repeated contact with the police and the criminal legal systems due to underlying substance use, mental illness, homelessness, or extreme poverty – those who are sometimes dubbed "familiar faces." Residents, business owners, visitors, and stakeholders in the catchment area of LEAD can refer individuals engaging in non-violent law violations (e.g., shoplifting, drug use in the bathroom, loitering at transit stations) to LEAD instead of calling the police. LEAD has been shown to have a positive impact on their clients, but its effects on community-level policing are unexplored.

Our study compares changes in monthly rates of police calls (total, by misdemeanor vs. felony) and stops (total, by race, by officer-reported violation type) from January 2019 to March 2022 (the pre-LEAD period) and from April 2022 to December 2024 (the post-LEAD period) between the LEAD neighborhoods and "synthetic" LEAD neighborhoods generated using neighborhoods outside of the LEAD catchment area with similar pre-LEAD rates and sociodemographic characteristics. Results can inform the tailoring of LEAD to produce maximal health-promoting impact and/or scaling up to other neighborhoods in Minneapolis.

**Policy** 

Change is not an event, it is a process: Reviewing the effect of Naloxone Access and Good Samaritan Laws on opioid overdose mortality with an implementation lag Jonathan Burke\* Jonathan Burke, Katherine Wheeler-Martin, Magdalena Cerdá, Charles DiMaggio,

**Background:** To reduce Opioid Overdose Deaths (OODs), states have enacted Naloxone Access Laws (NALs) and Good Samaritan Laws (GSLs). While there have been systematic evidence syntheses of the impact of these policies, none have incorporated a lag in evaluation to account for time needed to disseminate policy knowledge and implement the policy with infrastructure development and training.

**Methods:** We conducted a systematic review of studies assessing the effect of NALs or GSLs on OODs in the United States without time restrictions, searching Ovid Medline, Ovid Embase, CINAHL, Criminal Justice Abstracts, PsycINFO, and Cochrane Library. We included studies that used a minimum one-year lag and without a critical risk of bias, assessed using Cochrane tools. The primary outcome of interest was the rate ratio of OODs after a one-year lag, with secondary syntheses using two-year lags, overdose deaths from fentanyl, and OODs by region and race. The review was registered with PROSPERO (CRD42023420056).

**Results:** Of 4,579 studies screened, 4 met inclusion criteria for primary analysis for NALs and 4 for GSLs. 2 of 3 studies assessing any NAL and 3 of 3 assessing any GSL had results compatible with no effect on OODs after a one-year lag. But after 2 years, 2 of 3 studies of any NAL showed fewer OODs (IRRs 0.82 and 0.74). The one study examining types of NALs found that states that allowed naloxone distribution at pharmacies without prescriptions had reduced OODs (IRR 0.73, 95% CI: 0.58-0.87), with a larger effect after two years (IRR 0.66, 95% CI: 0.43-0.90). The one study assessing types of GSLs found that stronger protections from arrests had no effect after one year (IRR 0.97, 95% CI: 0.92-1.02), but fewer OODs after two years (IRR 0.90, 95% CI: 0.85-0.95).

**Conclusion:** NALs and GSLs may require multiple years to demonstrate effects and this may be driven by measures that facilitate the easiest access to naloxone without a prescription and stronger legal protections from arrest.

### **Program Evaluation**

Using a Community-Engaged Approach to Evaluate the Center for Engagement in Diabetes Research Stephanie Albert, PhD\* Claire Cooper, MSPH, Lorraine Kwok, MPH, Laura Wyatt, MPH, David Lounsbury, PhD, Mona AuYoung, PhD, MS, MPH, Claire Cooper, MSPH, Aditi Luitel, MSPH, Karina D. Ramirez, MPH, Emma Rodgers, MSPH, Jennifer Zanowiak, MA, CEDER Partnership Hub, Earle Chambers, PhD, MPH, Arleen Brown, MD, PhD, Nadia Islam, PhD,

The Center for Engagement in Diabetes Research (CEDER) advances research by fostering national collaborations across community organizations, health systems, and academic institutions. CEDER offers consultation and studio services tailored to investigators and community groups engaged in type 2 diabetes-related work. This abstract describes the community-engaged approach used to evaluate the CEDER model and early insights on facilitators and barriers to co-developing and coleading a mixed methods process and outcome evaluation. CEDER created a range of authentic opportunities for community and academic partners to contribute to the decision-making process. We assembled an evaluation workgroup (EWG) comprised of faculty and staff from 3 academic institutions, with substantial experience in community-engaged programming and research. The EWG convenes biweekly to guide the development and implementation of CEDER's evaluation plan. Community and academic partners can be part of the EWG by attending EWG meetings or meeting individually with EWG faculty. Key opportunities for contributing knowledge/guidance include listening sessions focused on specific evaluation components and in-person meetings featuring indepth conversations on the evaluation. These are complemented by virtual biweekly leadership and bimonthly all partner meetings and email communication. Through discussion, the EWG identified facilitators of the community-engaged approach including the diverse composition of contributors to planning and executing the evaluation, a commitment to all partners having an equal voice in the process, and having the ability to tap into partners' expansive networks to magnify inclusion of underrepresented communities in planning and carrying out evaluation activities. The primary challenges to community-engaged evaluation were limited time and competing priorities. We will provide recommendations for participatory methods of evaluation for future health equity initiatives.

Race/Ethnicity

Understanding the drivers and modifiers of race/ethnic inequities in ease of and satisfaction with access to healthcare Amanda Simanek\* Amanda Simanek, Namhee Kim, Aditi Kumar, Yvette Castaneda, Melissa Chen,

Socioeconomic barriers to healthcare access, such as cost, have declined, whereas transportation barriers have worsened over the last decade for Non-Hispanic Black (NHB) and Hispanic compared to Non-Hispanic White (NHW) individuals in the U.S. During the same period, interpersonal and institutional racism have emerged as key barriers to accessing healthcare among racialized minorities. However, the importance of such factors in shaping race/ethnic inequities in healthcare access remains unclear. The aims of this study were to examine 1) the association between race/ethnicity and ease of healthcare access, 2) the extent to which socioeconomic factors (i.e. cost, transportation) or interpersonal (i.e. disrespect by, quality of care from, and trust of providers) and institutional (i.e., trust of medical settings) racism explain these relationships, and 3) whether associations vary across region and community type. Data were from 6748 U.S. adults in the Association of American Medical Colleges CHARGE Investigates survey. Structural equation models were used to examine total, direct, and indirect effects adjusting for age, gender, and income level, and stratified by region and community type. Transportation and trust (provider) were statistically significant mediators of dental, reproductive, specialty, mental health, long-term, and genderaffirming care for NHB versus NHW individuals. Cost, transportation, quality, and trust (provider) were statistically significant mediators for primary, emergency, pediatric, and specialty care for Hispanic versus NHW individuals. Respect and trust (provider/setting) were statistically significant mediators for primary, emergency, pediatric care, long-term, end-of-life, and gender-affirming care, for NH Other versus NHW individuals. Associations varied by region and community type. Findings suggest interventions aimed at improving access to healthcare should be tailored by race/ethnicity, region, and community type of individuals.

Race/Ethnicity

The Black, Indigenous and People of Color Exit Counternarrative Project Tomas Zurita\* Tomas Zurita, Adri Jones,

Black, Indigenous, and people of color (BIPOC) students face systemic challenges in predominantly white institutions despite institutional commitments to diversity. Students encounter microaggressions, lack of representation, and insufficient support, leading to isolation and racial battle fatigue. This project explores the experiences of BIPOC students in their graduate programs at the OHSU-PSU School of Public Health, focusing on how they navigate institutional structures and address equity gaps. Using critical race theory and grounded theory approaches, I conducted 24 in-depth, semi-structured interviews with recent graduates. Thematic analysis revealed insights on community building, advocacy, and the need for institutional transformation. The project highlights community cultural wealth, perseverance, mentorship, and systemic change, centering the voices of these students throughout their journeys. The counternarrative investigates three main questions: (1) How do BIPOC students navigate institutional structures within their graduate programs? (2) How do their experiences differ based on their background/positionality? (3) In what ways do BIPOC students contribute to addressing equity gaps within the institution? Preliminary findings reveal that BIPOC students draw strength from peer networks and mentorship, find belonging in student-led groups, and engage in advocacy and leadership to foster inclusive changes. Their resilience and perseverance radiate as they overcome challenges in a predominantly white institution. The students envision a more equitable and inclusive future in higher education by reclaiming narratives and pushing for systemic change.

Race/Ethnicity

Involuntary psychiatric commitments following the Krudttønden attacks in Denmark Parvati Singh\* Parvati Singh, Geoffrey Carney-Knisely, Lars Andersen, Tim Bruckner,

Terrorist attacks may reduce social tolerance of disordered behavior that, in turn, may increase involuntary psychiatric commitments in a population. We examine whether the Krudttønden terrorist attacks that occurred in February 2015 in Denmark correspond with a proximate increase in involuntary psychiatric commitments in the Danish population. We retrieved monthly count of involuntary psychiatric commitments (outcome) and voluntary (i.e. non-coercive) psychiatric inpatient admissions for Denmark from the Danish Psychiatric Central Research Register, from January 2010 to December 2018. We defined our exposure as a binary indicator of February 2015 (month of the Krudttønden terrorist attacks). Results from time-series analysis indicate 27 additional involuntary psychiatric commitments in February 2015 (p < 0.05), controlling for autocorrelation and the concomitant series of voluntary psychiatric inpatient admissions. We do not observe statistically detectable relations between the exposure and voluntary psychiatric admissions. Our findings suggest reduced social tolerance immediately following terrorist attacks.

### Reproductive health

The CARES Project: A community-engaged project to explore and improve abortion-related self-care resources in Allegheny County, Pennsylvania Zoé Hendrickson\* Zoé Hendrickson, Alexa Pierce, Taylor Mathis, Sheila Ramgopal, Amy Collins, Neha Devineni, Natalie Sweet, Olivia Stransky, Sarah Sanders, Elizabeth Mosley, Cynthia Salter,

Pregnant people in the United States face significant barriers to accessing quality, timely, abortion care. Post *Dobbs*, these barriers have intensified, widening inequities nationwide. Self-care resources can prioritize autonomy and reduce abortion care barriers as people navigate their pregnancies. The Self-Care for Abortion through Reproductive Justice, Doulas, and the Arts (CARES) Project uses a community-engaged approach to examine the support received and self-care resources used before, during, and after abortion care in Allegheny County, Pennsylvania, to identify how to better meet people's needs. This community-academic partnership includes public health and medical schools, service providers, and reproductive justice and community arts organizations. The mixed-methods CARES Project uses qualitative, quantitative, and arts-based methods. To date, we have conducted 19 qualitative interviews with frontline abortion workers, doulas, and abortion clients; 40 surveys with post-abortion clients; and an arts-based workshop. Data collection and analysis will conclude in early Summer 2025. Preliminary survey findings suggest that abortion clients - most of whom were in their late 20s, had some college education, and identified as Black reported emotional, logistical, informational, and financial support when seeking abortion services. However, legal, financial, and social barriers to accessing abortion care remained. Self-care resources were used infrequently, most often before rather than during or post-abortion. Frontline abortion workers emphasized that while community resources exist to support clients, legal, financial, and social barriers prevent people from being connecting to them. To address ongoing barriers to support and care for abortion clients in Allegheny County, there is an urgent need to: 1) improve resources for clients to use not only before, but also during and post-abortion and 2) better connect people with existing resources.

### Reproductive health

The Emergency Department and First-Touch Encounters Among Pregnant Women: An Examination of Births from A Single Delivery Hospital in a larger Healthcare System Angela Campbell\* Angela Campbell, Kelli Ryckman, Austin Knies, Andreia Alexander, Lucia Guerra-Reyes, Sarah Wiehe,

**Study Objective:** This study describes a population that could be targeted for prenatal care interventions. We compared characteristics of pregnant women whose first touch with the healthcare system in which they deliver is in the emergency department (ED) to pregnant women whose first touch with the healthcare system occurs in a non-ED setting.

**Methods:** We sampled the electronic health records of mothers who had a live birth in a single urban hospital in Indiana in 2022 (N=3,205). All healthcare encounters that occurred in the healthcare system of delivery during the mother's pregnancy were evaluated. Descriptive statistics were examined.

**Results:** Of all deliveries, 20.5% had their first touch with the healthcare system in the ED. A significantly larger proportion of that population were insured by Medicaid (87.1%) and were Non-Hispanic Black (39.2%) or Hispanic (29.5%) compared to the population whose first touch was not in the ED (60.9% insured by Medicaid, p<.001, and 25.6% and 19.7% Non-Hispanic Black and Hispanic, respectively, p<.001). Among women who had at least two prenatal care visits, 41.8% of women whose first touch was in the ED received prenatal care in the first trimester compared to 90.1% of women whose first touch was not in the ED (p<.001).

**Conclusion:** Women whose first touch with the healthcare system during pregnancy occurs in the ED may need prenatal care outreach. Offering connection to care and wrap-around services to this population could improve the percentage of women who receive prenatal care in the first trimester.

### Social/relational factors

## Social Norms Change and Tobacco Use: A Systematic Review and Meta-Analysis of Interventions Shaon Lahiri\* Shaon Lahiri,

Background: Effective approaches to reduce tobacco use include taxes and smoke-free policies. However, these approaches falter in countries with relatively weak tobacco regulatory environments, such as several low- and middle-income countries where the tobacco industry has shifted operations. Social norms represent a potent lever of change to reduce tobacco use, as tobacco use spreads through social networks, influencing social norms around tobacco use in turn. But do interventions leveraging social norms or social influence actually reduce tobacco use, and if so, how do their underlying mechanisms work?

Methods: To answer this question, we conducted a systematic review and meta-analysis of the experimental and quasi-experimental intervention literature written in English in which social norms or social influence are used in some way to reduce any type of tobacco use. We searched Scopus, PubMed, PsycInfo, Clinicaltrials.gov, ProQuest Dissertations, the Cochrane Trial Registry, as well as the websites of the Society for Research on Nicotine and Tobacco, the Open Science Framework, medrXiv, and the Truth Initiative from inception to May 30, 2024.

Results: Ninety-five studies met inclusion criteria. Two hundred effect sizes from 86 studies were included in the tobacco outcomes meta-analysis, and 66 effect sizes from 29 studies were included in the social norms outcomes meta-analysis. Social norms change interventions had a statistically significant effect on reducing tobacco use and pro-tobacco social normative perceptions (g = 0.233, 95% Confidence Interval (CI) = 0.166, 0.301, p<.001 and g = 0.292, 95% CI = 0.090, 0.494, p=0.007, respectively). Interventions were commonly conducted through multi-component education sessions, often coupled with regular 'booster' sessions over time.

Conclusion: Social norms interventions can be used effectively to reduce individual tobacco use, as well as pro-tobacco normative perceptions.

### Social/relational factors

Experiences of social cohesion and trust in HIV prevention efforts among adolescents in western Kenya Nema C.M. Aluku\* William Story, Yvonne Wanjiru, Maureen Wanjiru, Catherine Muteithia, William T. Story,

**Background:** Kenya has some of the highest rates of HIV among adolescents in the world. Mistrust and social exclusion are primary barriers to HIV prevention among youth in Kenya. The aim of this study is to explore experiences of trust and social cohesion when addressing HIV prevention among adolescents in western Kenya.

**Methods:** This study was implemented in three counties in western Kenya. In-depth interviews (IDIs) were conducted with 12 adolescents (15-19 years), 6 parents, 6 religious leaders, 6 teachers, and 6 healthcare workers. All IDIs were audio recorded with consent, transcribed verbatim, and translated into English. Transcripts were thematically coded using Dedoose and code summaries were developed to identify factors associated with community social cohesion.

Results: Individuals participate in community activities and get along with one another, while demonstrating mutual support. There is a strong sense of belonging among respondents; however, those who do not cooperate are excluded from the community. Additionally, people who are marginalized due to their religion, ethnicity, or HIV status face social exclusion. Trust played a crucial role in the context of HIV-related information. Boys mentioned trusting those were honest and humble, while the girls placed their trust in people who they could confide in and were virtuous. Parents noted that their children trust people who are religious, honest, disciplined, and wise. Regarding opinion leaders, youth value the views of their parents and religious leaders, though girls prioritize the opinions of women in their lives.

**Conclusion:** Overall, community members generally support each, but certain groups of people (including those living with HIV) are excluded. Further, boys, girls, and parents valued different qualities in trusted individuals. These results provide useful information for future interventions to enhance social cohesion in communities affected by HIV western Kenya.

### Socioeconomic status

Global Trends in Food Insecurity in High- and Low-Income Countries, 2009-2023 Susan Osayande\* Susan Osayande, Thomas Fuller-Rowell,

**Background:** Food insecurity among disadvantaged socioeconomic groups is a major public health concern, and a key focus of the United Nations sustainable development goals. However, little is known about how food insecurity has evolved globally over the past 15 years, particularly across high- and low- income countries. Understanding these trends is crucial for developing targeted policies to reduce food insecurity around the world.

**Methods:** We conducted a multilevel analysis using Gallup World Poll data to examine food insecurity trends in 162 countries from 2009 to 2023. Food insecurity was measured as the proportion of individuals in the bottom 60% of the income distribution who reported that there were times in the past 12 months that their family was unable to afford food. Approximately 1,000 respondents were sampled within each country at each time point (approximately 600 in the bottom 60% income group). Countries were categorized into World Bank income-level classifications: low (n = 23), lower-middle (n = 40), upper-middle (n = 45), and high (n = 54).

**Results:** The global average level of food insecurity in 2009 was 38.2% (95% CI [34.8%, 41.5%]). The slope estimate indicated an 8.96-unit global increase in food insecurity across the 15-year period (95% CI [6.4%, 11.48%], p < .001), a 23.5% increase. Food insecurity trends differed substantially across income classifications, with the gap between low- and high-income countries widening from 37.5% points in 2009 to 54.28% points in 2023 (p < .001), a 44.7% increase.

**Conclusion:** The results suggest a global crisis in food insecurity around the world, with large magnitude increases on levels and cross-country disparities over the past 15 years. The rise in food insecurity, particularly within lower-income countries, highlights the urgent need for targeted policies and immediate action.

### Socioeconomic status

The influence of maternal life course neighborhood exposures on Black/White disparities in adverse birth outcomes in South Carolina Abigail Kappelman\* Abigail Kappelman, Annie Ro, Belinda Needham, Lindsay Admon, Nancy Fleischer,

**Introduction**: Exposure of mothers to neighborhood-level social disadvantage, defined as low college completion and high poverty levels, from childhood to adulthood may impact infant low birth weight (LBW). Concurrently, Black/White differences in life course neighborhood social disadvantage exposure and effect may provide insight on disparities in birth outcomes.

**Methods**: Using a multigenerational dataset of maternally linked birth certificates from South Carolina (1989-2020), we defined maternal neighborhood exposure in childhood and in adulthood as either disadvantaged (census tract with > period-specific median poverty or < period-specific median college completion) or affluent, allowing construction of four trajectories (always disadvantaged, upwardly mobile, downwardly mobile, always affluent). Multivariable logistic regression models estimated associations between maternal trajectories and infant LBW. We adjusted for maternal age, socioeconomic indicators, and comorbidities; infant sex; and county rurality. Interaction terms tested for effect modification by maternal Black/White race of the association of interest.

**Results**: LBW was more prevalent for Black vs. White women overall (13.4 vs. 7.1%) and within every trajectory of exposure (all p<0.001). Black women were more likely than White women to be always disadvantaged (college: 33.3 vs. 27.5%; poverty: 46.0 vs. 17.2%; both p<0.001) and were less likely to be upwardly mobile (both p<0.001). Only the always affluent trajectories, to which Black mothers were least likely to be exposed, were associated with lower odds of LBW (always affluent vs. always disadvantaged (reference); college, aOR 0.89 [95%CI 0.83-0.95]; poverty, 0.91 [0.85-0.97]). Interactions with maternal race were not significant.

**Discussion**: The greater life course exposure of Black mothers to disadvantaged neighborhoods highlights how adverse neighborhood exposures can contribute to racial disparities even without effect modification present.

### **Structural factors**

Highlighting Policy-to-Practice Gaps in Emergency Response: A Social Network Analysis of the 2023 East Palestine Train Derailment Emergency Response Anthony Orsino\* Anthony Orsino,

Effective emergency response relies on prepared, interdisciplinary networks of organizations that work together to minimize poor disaster and health outcomes in collaboration with affected communities. However, this doesn't always happen: gaps often emerge between planned emergency response structures and their real-world execution. Such gaps, especially in under-resourced communities, can be antithetical to disaster response best practices. This proposed PhD dissertation work applies social network analysis (SNA) to the organizations involved in the 2023 East Palestine, Ohio train derailment response to understand the unique systemic barriers non-urban and border communities face in collaborative emergency management that may result in policy-to-practice gaps and poor disaster outcomes.

This research has three primary aims: (1) to analyze and compare organizational network models of the planned and observed emergency management systems, identifying key policy-to-practice deviations; (2) to assess the efficiency of the emergency response network over time, capturing shifts in inter-organizational coordination; and (3) to integrate qualitative insights from key informant interviews to contextualize network findings and inform evidence-based recommendations for improving future emergency response strategies in similar settings.

By leveraging SNA, this study will provide empirical evidence on how nonurban emergency management networks function in practice, highlighting structural inefficiencies and opportunities for intervention. Understanding these dynamics is critical for optimizing emergency preparedness and response policies, particularly in non-urban and border communities that face unique logistical and resource constraints.

This presentation will discuss methodological approaches and the empirical basis of this work and spark broader discussions on reducing policy-to-practice gaps for bolstered preparedness in vulnerable communities.

### **Structural factors**

# : Gendered State Violence and Health: The Role of Child Welfare Services in Cardiometabolic Disease Distribution Kendall Riley\* Kendall Riley,

The central goal of the Child Protective Services and the foster care system—collectively known as the child welfare system (CWS)—is to promote child wellbeing and safety. Most families, often mothers, are reported to CWS for poverty-related hardships, yet CWS resources are provided on the condition of ongoing monitoring from CWS and threat of family separation. A state's willingness to leverage coercive authority within its social institutions may indicate harm in its broader social environment, potentially undermining population health. This project examines how a state's deployment of CWS influences geospatial health burden. Using the CDC's 2024 PLACES data, I assess county health using five chronic conditions (i.e., hypertension, coronary heart disease, chronic obstructive pulmonary disease, diabetes, and stroke). Geocoded county data was linked to state-level administrative data of CWS activity. The mean rate of investigative reports of child maltreatment and the rate of children entering foster care between 2015-2019 signal a state's mobilization of CWS as a mechanism of gendered social control. Covariates related to child welfare service and health (e.g., education and incarceration) are used in all models. Items were clustermean centered to avoid conflating state and county effects. All analyses were conducting using Stata mixed. Preliminary findings reveal that more intense CWS use in a state is associated with higher county-level cardiometabolic disease prevalence. Additional analyses will explore how a state's use of CWS may uniquely affect counties of differing racial and ethnic characteristics using cross-level interactions (with all lower order interactions and main effects included). Thus far, findings suggest that CWS may be an additional dimension through which gendered state violence undermines population health. This research contributes to our understanding of the intersection between state power, gendered structural violence, and health.

### **Structural factors**

Labor Market Institutions and Mental Health in America Mutiu Fakorede\* Megan Reynolds, Akansha Batra, Jeb Wu, Chelsea Michalka,

Health scholars are increasingly focused on how the structural characteristics of states contribute to widely observed geographic variations in health and health inequalities. Despite this high-level perspective emphasizing structural contexts, surprisingly little attention has been paid to cross-state differences in the labor market institutions that shape the exposure to, and meaning of, work-related factors that impinge on health. Following from emerging literature that individual-level wages, union membership, and unemployment insurance affect health, this study investigates whether the generosity of labor market institutions in a state are associated with population health. Our investigation employs a novel investigator-built calculator that uses state parameters to impute the dollar value of minimum-wage work, labor union income (i.e., wage and health insurance premiums), and unemployment insurance for a worker in a given state and year. Linking this state-year data to roughly 4,000 individuals each of 20 repeated cross-sections of the Behavioral Risk Factor Surveillance System from 1999-2019, we characterize the relationship between labor market institutions and mental health among individuals across the income distribution. We use state random slope models to evaluate the extent to which labor market institution generosity is associated with individual level health as well as how that associations may vary across states. The results of our study contribute to knowledge on population health by highlighting the potential pertinence of labor market institutions as a structural determinant of health.