co-facilitator, and CCH staff. These custom panels bring together 8-10 community members familiar with a research topic or community of focus, offering feedback on adaptations that can improve research relevance and feasibility. Until the COVID-19 pandemic, all ShARPs were conducted in person. From March 2020 to January 2023, panels occurred virtually. From 2023, the option of virtual or in-person ShARPs has been available. Count data and informal interview data were reviewed. RESULTS/ANTICIPATED RESULTS: The number of ShARPs peaked in 2019 and has remained stable. The first virtual ShARP occurred on April 22, 2020, and all subsequent sessions have been virtual. As of October 2023, 6 ShARPs have occurred, with no research teams pursuing an in-person session despite its availability. Participants described virtual ShARPs as convenient and accessible. Academic teams cited concern about low community member participation should they opt for an in-person session. DISCUSSION/SIGNIFICANCE: It is feasible to conduct ShARPs virtually and is the current preferred modality. Whether virtual ShARPs enhance, neutralize, or detract from the effectiveness of the session is unknown and guides our future work. More research is needed, including discussion, and learning from our CTSA colleagues.

249
Defining the Role of Hedgehog Signaling in Breast Cancer Risk of non-Hispanic Black Women

Savanna A. Toure, Melody L. Stallings, Joshua W. Ogony, Laura M. Pacheco-Spann, Mark E. Sherman and Derek C. Radisky

OBJECTIVES/GOALS: The molecular basis of increased risk of triple negative breast cancer in non-Hispanic Black women represents a critical knowledge gap that this research is designed to address; successful completion of this work could lead to better prevention, earlier stage diagnoses, and possible discovery of novel therapeutic strategies for this population. METHODS/STUDY POPULATION: We have recently generated a living tissue cohort of 11 non-Hispanic Black and 25 non-Hispanic White women who underwent breast surgery at Mayo Clinic. Gene expression profiling of normal breast tissue from this cohort has identified a pattern of gene expression differences that have been associated with the development of basal breast cancer and are also reflective of Hedgehog (Hh) signaling. We will identify protein-based biomarkers for Hedgehog signaling within normal breast tissue using immunohistochemistry methods. We will culture primary human mammary epithelial cells and further separate luminal and myoepithelial cells using flow cytometry to then decipher Hedgehog signaling. RESULTS/ANTICIPATED RESULTS: We anticipate identifying and localizing protein-based biomarkers for Hedgehog signaling within myoepithelial cells of non-Hispanic Black women. Using our findings, we aim to create a biomarker risk model for triple negative breast cancer and validate this model within a separate and larger cohort of women to predict breast cancer risk. DISCUSSION/SIGNIFICANCE: In addition to immediate benefits from improved risk prediction, the proposed work has the potential to provide new insight into the driving forces underlying basal breast carcinogenesis and the distinct biological differences that distinguish non-Hispanic Black women from non-Hispanic White women.

250
Gender Disparities in the Acquisition of Lower Extremity Prosthetics Following Major Limb Amputation

Julien Levy[1], Neil Kamdar[1], Widya Adidharma[2], Stephen Kemp[2] and Rachel Hooper[2]
[1]University of Michigan Medical School and [2]Michigan Medicine Section of Plastic Surgery

OBJECTIVES/GOALS: The time between lower extremity amputations and prosthetic acquisition profoundly influences patient rehabilitation and mortality outcomes. Our primary outcome was time to prosthetic acquisition following major limb amputation. We hypothesize that women face an increased time lag between amputation and prosthetic acquisition compared to men. METHODS/STUDY POPULATION: We used the 2015-2021 Truven Marketscan Medicare and Commercial Claims Administrative dataset to identify individuals with lower extremity amputations based on CPT codes. We excluded patients < 18 years old, those with prior/concurrent major extremity amputations, and those with <= 31 days discontinuity in enrollment. To estimate time to prosthetic acquisition after initial amputation, Weibull Accelerated Failure Time multivariable regression models were used to estimate unadjusted and adjusted time ratios and 95% confidence intervals comparing men to women. We adjusted models for age, Medicare supplement/commercial payer, Metropolitan Statistical Area (MSA), amputation type, social deprivation index, and Elixhauser comorbidities. RESULTS/ANTICIPATED RESULTS: We identified 4,054 patients with major lower extremity amputations (75% below knee and 25% at or above knee). Patients were predominantly male (72%). For patients who received prosthetics, 39.06% of men and 31.28% of women received prosthetics within the first three months of amputation ($p<0.001$). Time ratios > 1 indicated longer time to prosthetic acquisition between comparison groups. The adjusted time ratio for women compared to men for the time to acquisition of prosthetics was increased; this was statistically significant (TR 1.3281, 95% CI 1.1667, 1.5118). This time ratio suggests that if a man received a prosthetic in 100 days, a women would receive her prosthetic in 133 days. DISCUSSION/SIGNIFICANCE: We found a significant difference in the time to prosthetic acquisition following major limb amputation and acquisition rate in the first three months of amputation among men and women. Successful rehabilitation, quality of life, and healthcare costs are influenced by the timeliness of prosthetic acquisition.

251
The Appalachian Translational Research Network (ATRN) Newsletter: Supporting Communication and Collaboration among Academic and Community Partners to Improve Health in Appalachia

Ashley Gail Hall[1], Beverly Stringer[2], Jeff Grever[2], Ian Moore[3], Emma Jones[4], Rebekah Crawford[5], Keena Moore[6], Kristin Miller[7,8] and Gia Mudd-Martin[1] on behalf of the Appalachian Translational Research Network Executive Leadership Committee (ATRN ELC)
[1]University of Kentucky; [2]The Ohio State University; [3]West Virginia Clinical and Translational Science Institute (WVCTSI); [4]Cincinnati Children's Hospital Medical Center (CCHMC); [5]Ohio University; [6]Wake Forest University School of Medicine; [7]Integrated Translational Health Research Institute of Virginia (iTHRIV) and [8]University of Virginia

https://doi.org/10.1017/cts.2024.229