affirming language within free text medical notes of TGE patients. METHODS/STUDY POPULATION: We conducted a qualitative analysis of free text medical notes in adult (> age 18 years) TGE patients seen in inpatient and outpatient medicine and general surgery clinics between January 2019 and January 2022 at three independent health systems in San Francisco. TGE patients were identified based on self-identified gender identity, sex assignment at birth, and legal sex. We conducted a thematic analysis to assess use of gender-affirming language, including self-identified pronouns, chosen names, gendered and gender-neutral descriptors, sex-related traits, and pathologizing language. RESULTS/ANTICIPATED RESULTS: Within pilot data, we found inconsistent use of gender-affirming language within notes, with pronounced variability within the history of present illness, the clinical one liner, and the problem list. Within one liners, many did not include patient-identified pronouns (81%), omitted chosen names (53%), and utilized gendered language that was misaligned with patient self-identified gender identity (27%) - frequently including the use of outdated  $terms\ i.e.\ female-to-male\ and\ transsexual.\ Many\ problem\ lists\ included$ gender-related care, with some describing hormonal and surgical interventions and others utilizing language to pathologize trangender status. DISCUSSION/SIGNIFICANCE: Our study identifies gaps in the use of gender-affirming language in medical notes. Of particular significance in the era of open notes wherein patients can view their medical records, our study offers a framework for assessing and increasing genderaffirming language use within free text medical notes that can be applied across health systems.

156

## Approaches to disseminating a community engagement tool through capacity building

Emily B. Zimmerman<sup>1</sup>, Carlin Rafie<sup>2</sup>, Theodora Biney-Amissah<sup>1</sup>, Samantha Lee<sup>1</sup>

<sup>1</sup>Virginia Commonwealth University <sup>2</sup>Virginia Tech

OBJECTIVES/GOALS: Despite the importance of stakeholder engagement in research, there remains a critical need for methods that facilitate the engagement of diverse stakeholders throughout the research process. We describe dissemination and capacity building for the SEED Method, which was created to involve stakeholders in the research development process. METHODS/STUDY POPULATION: In order to raise greater awareness of the SEED Method and to build capacity among research teams, we received funding from the Patient-Centered Outcomes Research Institute (PCORI) for a 2-year project to implement a plan of outreach, training, interactive learning, and technical assistance, as well as an innovative partnership with the Extension Foundation. Tools created for this project include an internet site providing tools and materials, live and on-demand webinars, training videos, SEED materials, a blog, and an interactive course/toolkit. In addition, we created a monthly learning collaborative and provided direct technical assistance to teams using the SEED Method in their research engagement projects. We evaluated user satisfaction with the tools and support provided through online surveys. RESULTS/ ANTICIPATED RESULTS: We highlight the routes to reaching potential users and diverse approaches to capacity building, including multimedia training materials, interactive learning sessions, and customized technical assistance. As a result of outreach and capacity building, there are currently 13 research teams using the SEED Method to engage stakeholders in research development across various topics. We link this result to the dissemination and capacity building strategies utilized and the paths through which teams learned about the SEED Method. We also look at how the teams are using the method in terms of project

goals and approaches to adapting the SEED Toolkit. DISCUSSION/ SIGNIFICANCE: The use of PHR continues to increase, and with it the emergence of new approaches to involve patients, stakeholders, and communities. Innovations in engagement need to reach potential users and build capacity among researchers and communities.

157

## Association Between Structural Racism and Acuity of Illness at Initial Presentation in Pediatric Patients with Solid Tumors\*

Alexandra Cathcart<sup>1</sup>, Sharon M. Castellino, Heeju Sohn, Nicholas DeGroote, Ann Mertens, Xu Ji <sup>1</sup>Emory University

OBJECTIVES/GOALS: Racial/ethnic minoritized children experience poorer cancer outcomes, which may be driven by structural racism. We apply an index that combines segregation and neighborhood vulnerability to a pediatric oncology population and assesses its association with acuity of illness at initial presentation. METHODS/STUDY POPULATION: A retrospective analysis will be performed in a cohort of pediatric patients diagnosed with solid tumors at Children's Healthcare of Atlanta (CHOA) from 2010-2018 (N=1149). The sample will be linked to a structural racism index (SRI) that has been established in our prior work. We abstract data from medical records to quantify initial acuity of illness based on the need for ICU-level resources. Differences in sociodemographic characteristics will be analyzed by the SRI, using chi-squared, Student t-tests, and ANOVA where appropriate. Logistic regression models will be used to assess the association of the SRI with acuity of illness. RESULTS/ANTICIPATED RESULTS: We anticipate that relevant sociodemographic characteristics (e.g., race/ethnicity, insurance status) differ by the SRI. The CHOA Cancer Registry includes a racially and ethnically diverse group of patients: 63% of the cohort is White, 30% is Black,10% are Other, and 15% are Hispanic/Latino. Furthermore, we anticipate that pediatric patients with solid tumors living in counties with greater levels of structural racism as measured by the SRI experience an increased acuity of illness at initial presentation. DISCUSSION/ SIGNIFICANCE: By applying a novel index quantifying structural racism, we will provide new information about the structural barriers patients and families face prior to a pediatric cancer diagnosis. This work will allow us to identify areas for potential interventions in this vulnerable young patient population.

**158** 

## Associations Between County Level Poverty and Firearm Injuries in the State of Maryland

Khadijah Tiamiyu, James Byrne, Katherine Hoops Johns Hopkins School of Medicine

OBJECTIVES/GOALS: The United States is experiencing an epidemic of firearm deaths and injuries. Poverty and other socioeconomic factors have been linked to firearm injuries on the national level. The goal of this study is to examine the relationship between county level poverty and firearm injuries in the State of Maryland. METHODS/STUDY POPULATION: This is a cross sectional study assessing fatal and non-fatal firearm injuries of all ages between 2018-2020 utilizing data from the State of Maryland's Health Services Cost Review Commission. Our primary analysis will involve calculating injury and mortality rates to assess if fatal and non-fatal