

interpretation; 2) Accessibility: increasing screening throughput, improving rural community access to breast cancer care, and increasing opportunistic screening; 3) Sensitization: increasing patient and health worker awareness of clinical presentations of breast cancer, reducing cultural barriers, and improving trust in the medical community. **DISCUSSION/SIGNIFICANCE:** Innovators seeking to solve problems in early breast cancer detection in LMICs should focus on ineffective clinical processes, accessibility, and sensitization. In conjunction with prompt treatment, there is potential to reduce breast cancer mortality rates in line with the Global Breast Initiative.

234

### Understanding the utility of an evaluation instrument and a feedback mechanism in community-based participatory research (CBPR) partnerships

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**OBJECTIVES/GOALS:** To examine i) how longstanding ( $\geq 6$  years) community-based participatory research (CBPR) partnerships nationwide implemented a validated questionnaire to measure success and its contributing factors and ii) how the CBPR partnerships utilized and applied a feedback mechanism, or reports of findings from the questionnaire and a facilitation guide **METHODS/STUDY POPULATION:** This mixed methods study builds upon a larger NIH-funded project entitled 'Measurement Approaches to Partnership Success (MAPS). MAPS developed and validated the 109-item MAPS questionnaire to measure success in longstanding ( $\geq 6$  years) CBPR partnerships. In 2020, 55 CBPR partnerships nationwide completed the MAPS Questionnaire and, a year later, received the MAPS Feedback Mechanism, consisting of questionnaire findings and a facilitation guide on how to present the findings. In this follow-up study, we administered multi-method surveys to each partnership contact person in 2022 to examine their experience with and utility of the MAPS Questionnaire and the MAPS Feedback mechanism. We performed descriptive analysis of quantitative responses using SAS and thematic analysis of qualitative responses. **RESULTS/ANTICIPATED RESULTS:** Survey responses have been presently collected from 14 partnerships. Preliminary findings suggest that the most frequently reported benefits of completing the MAPS Questionnaire included stimulating partnership reflections and ease of completion. Many partnerships shared results of the MAPS Questionnaire by e-mail or during partnership meetings. Nearly half of the partnerships rated components of the MAPS feedback mechanism as useful. Over one-third of the partnerships reported that the COVID pandemic limited their capacity to engage with the MAPS Feedback Mechanism. Key qualitative suggestions included making the MAPS Questionnaire shorter, providing it in a different format, and offering additional facilitation to support the implementation of the MAPS Feedback Mechanism. **DISCUSSION/SIGNIFICANCE:** This study examines how CBPR partnerships utilize an evaluation instrument and apply results on success. Current findings suggest potential utility of the MAPS Questionnaire and Feedback Mechanism for ongoing evaluation. Reducing the questionnaire length and providing facilitation resources may enhance implementation across diverse settings.

235

### Use of Community Review Boards to Evaluate the Utility of the ICF Navigator - A Browser-based Tool to Create Plain-Language Informed Consent Forms

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**OBJECTIVES/GOALS:** To evaluate the clarity of plain-language informed consent forms (ICF) created using a browser-based tool called the ICF Navigator, we solicited feedback from two community review boards (CRB) to ensure the resulting ICF met the informational needs of all potential participants, including those with limited health literacy skills. **METHODS/STUDY POPULATION:** Community-engaged research highlights the importance of involving community members in the planning and execution of translational research projects. Virtual discussions were held to elicit feedback from two separate CRBs on the understandability of an ICF that was generated using an online, browser-based tool that we designed to aid researchers in the creation of plain-language ICFs. CRBs included representation of diverse communities from across the state of Arkansas, including individuals who may have limited health literacy skills, those with and without prior experience participating in clinical research projects, members living in rural and urban settings, and those whose race or ethnicity have been traditionally underrepresented among clinical research participants. **RESULTS/ANTICIPATED RESULTS:** CRB feedback was used to inform actionable improvements to the tool, such as removing content redundancies and embedding tips to guide researchers on how best to optimize the clarity and understandability of resulting ICFs. Program refinements in response to the feedback have been implemented and will be evaluated in another round of CRB discussions in early 2023. Feedback from this follow-up CRB session will also be presented in addition to a discussion of how the feedback was used to improve the online tool, which will ultimately be available for free use by other institutions. **DISCUSSION/SIGNIFICANCE:** The use of community feedback to optimize the functionality of the ICF Navigator demonstrates the value of CRBs for ensuring that ICFs are culturally salient and readily understandable by all potential research participants, particularly those who may have limited health literacy skills, thereby promoting more equitable opportunities for all.

236

### Using Learning Health System Principles to Improve Cancer Research: The Citizen Scientist Cancer Research Curriculum

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**OBJECTIVES/GOALS:** Team science is a focus of the University of Florida Clinical and Translational Science Institute (UF CTSI) Learning Health System Initiative. Citizen Scientists (CSs) are integral research partners who provide pragmatic feedback. The UF Health Cancer Center (UFHCC) aspired to adopt a similar approach to

research, starting with onboarding CSs. **METHODS/STUDY POPULATION:** To understand the content with which they would be engaging through the CTSI, CSs first became certified through a self-paced online curriculum focused on clinical research basics. UFHCC envisioned their onboarding as a companion piece to this first course, and CSs must complete both courses to work in cancer-focused research. The new CS Cancer Curriculum consists of a mix of didactic lessons with quizzes, case studies, a behind-the-scenes look at a research lab meeting, and interviews with CSs. As with the clinical research course, the cancer course was co-developed alongside the CSs and utilized the ADDIE (Analysis, Design, Development, Implementation, Evaluation) instructional design model. The course was implemented with UF CSs from July to September 2021 through Canvas. **RESULTS/ANTICIPATED RESULTS:** For the nine CSs completing this pilot test, scores for all didactic quizzes across the course were mostly high. Two CSs scored a perfect 100%, three missed only one question (98%), and two CSs missed two questions (96%). A course evaluation was completed by eight of the CSs and determined that most (86%) felt that they were capable of applying what they had learned. An additional 75% felt the course empowered them to advocate for the needs of all stakeholders involved in cancer research. Qualitative responses on the evaluation found that the course helped CSs better relate to the challenges faced by other stakeholders (patients, clinicians, caregivers) and helped them conceptualize how they could contribute to cancer research. **DISCUSSION/SIGNIFICANCE:** The partnerships within the UF CTSI have a direct impact on patient care through research studies in Florida and nationwide. CSs can be overlooked by researchers unfamiliar with concepts of a learning health system, including those in cancer research. By engaging these stakeholders, we may soon see similar impacts to cancer-related patient care.

239

### What Happens After Surgery? Postoperative High-Risk prescribing in Patients with Chronic Opioid Use

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**OBJECTIVES/GOALS:** Patients on chronic opioids face gaps in transitions of care in the time following surgery, increasing the risk for adverse events, specifically high-risk opioid prescribing. The objective of this study is to determine how rates of high-risk prescribing differ between patients with public and private insurance. **METHODS/STUDY POPULATION:** A retrospective cohort study of 1,435 adult patients with preoperative chronic opioid use on Medicaid or commercial insurance who underwent surgery between November 2017 and February 2021. Patients were identified using the Michigan Surgical Quality Collaborative (MSQC) database, a collection of perioperative data from 70 hospitals across the state of Michigan. Data from the MSQC were merged with Michigan's prescription drug monitoring program to provide additional information on pre- and postoperative opioid prescribing. Multivariable logistic regression was used to assess high-risk prescribing by the presence of a preoperative usual prescriber and insurance type. **RESULTS/ANTICIPATED RESULTS:** Overall, 22.7% of patients

on private insurance and 23.6% of patients on Medicaid fulfilled criteria for new, postoperative high-risk prescribing. Among criteria for high-risk prescribing, multiple prescribers was the most significant contributor (private insurance: 17.4%, Medicaid: 18.9%). Patients on Medicaid insurance did not have increased odds of new postoperative high-risk prescribing (OR = 1.067, 95% CI: 0.813-1.402). While fewer patients on Medicaid had a preoperative usual prescriber (86.9% and 90.9% respectively,  $p = 0.015$ ), there was no significant difference between the two insurance types in baseline rates of high-risk prescribing prior to surgery (private insurance: 43.4%, Medicaid: 46.0%,  $p = 0.352$ ). **DISCUSSION/SIGNIFICANCE:** While we do not observe disparities in high-risk prescribing between insurance types, rates of high-risk prescribing postoperatively are high across payer types. Further studies to determine the factors driving rates of high-risk opioid prescribing among patients with chronic opioid use are needed to identify areas for future intervention.

240

### Community Participant-based Study Design: Use of Virtual Focus Groups to Explore Acceptability of a Cooking Intervention among African-American Women Living in Washington, D.C.

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**OBJECTIVES/GOALS:** African-Americans are at increased risk for nutrition disparities; home cooking is a strategy to optimize dietary quality. To develop a cooking intervention, a mixed-methods community-based participatory, acceptability study was conducted to understand cooking behaviors, options for intervention content, and implementation factors. **METHODS/STUDY POPULATION:** Self-identified African-American adults were recruited from a larger community-based study within Washington, D.C. Five moderated virtual focus groups with four participants in each group were conducted in March and April of 2021. A semi-structured moderator's guide focused on cooking, meal habits, food choices, and the proposed cooking intervention was utilized. Qualitative data collected were verbatim transcriptions and notes from research team members. Thematic analysis was conducted using an iterative process among research team members. Participant validation interviews were conducted following the research team analysis. Electronic self-administered surveys were used to measure demographic, food environment, cooking behavior, health behavior, and psychosocial variables. **RESULTS/ANTICIPATED RESULTS:** Study participants ( $n=20$  females, mean age 60.1 years) lived in low-food resource neighborhoods but reported high food security ( $n=14$ ). Barriers to the intervention included traveling distances to other neighborhoods for produce, poor quality of vegetables and fruit within neighborhood stores, lack of trustworthiness from neighborhood store experiences, perception of decreased cooking skills, and competing priorities related to time and weekday schedules. Motivators included health promotion for self, family, community, and enjoyment from cooking. Virtual or in-person sessions were suggested. Intervention options included costs of recipe ingredients, using recipes with ingredient flexibility, nutrition information, and provisioning of or compensation for ingredients used in virtual classes. **DISCUSSION/SIGNIFICANCE:** Use of virtual focus groups for a participant-based design of a cooking intervention among African American adults living in low-food access neighborhoods provided acceptability results that were food and home environments contextual and provided barriers and motivators to participation and implementation of behavior from the intervention.