students, 80% less effective for Hispanic students, and not at all effective for Asian students compared to non-Hispanic White students in reducing chronic disruption referrals. SELC was also more effective for female students compared to male students for reducing chronic disruption referrals and not effective for reducing fighting referrals or suspensions among male students. DISCUSSION/SIGNIFICANCE OF IMPACT: SELC had an inequitable impact on reducing chronic disruption referrals by race, ethnicity, and gender. The groups impacted tended to have fewer chronic disruption referrals compared to non-Hispanic White students, which may have contributed to this finding. However, the degree of difference suggests a need to improve equitable impacts of SELC.

234

Using a human-centered design approach to generate improvements to the infrastructure of Clinical and Translational Science

Ellen Champagne, Elias Samuels, Maureen Brudzinski and Sarah Miles
University of Michigan

OBJECTIVES/GOALS: The goal of this project was to, first, identify potential improvements to administrators' processes surrounding the maintenance and export of a digital research platform using human-centered design and, second, explore whether this approach could be integrated into a system evaluation of implementation and impact of the platform. METHODS/STUDY POPULATION: In alignment with the A3 template for quality improvement, MICHR staff prepared to conduct a systems evaluation of MICHR's support and dissemination of Your Health Research (YHR), a digital platform for study participant recruitment by (1) identifying the background of programmatic and scientific opportunities being addressed, (2) assessing the current state of MICHR's management of YHR, and (3) identifying S.M.A.R.T. goals for improvement, as well (4) the drivers of improvement. The iterative nature of the work that was undertaken aligns with the intent of A3 framework which presents these 4 steps as an iterative process. These iterative efforts included a tabletop exercise, a blueprinting workshop, and a survey of MICHR program staff about potential improvements. RESULTS/ANTICIPATED RESULTS: YHR is designed to facilitate recruitment into clinical and translational research studies; the findings presented here show that it is feasible to evaluate the way MICHR deploys this tool for increasing effect. The use of Systems Evaluation Theory was not only appropriate (Renger, et al, 2025), this work shows how human-centered design approaches can be integrated into systems evaluations to facilitate the identification and continuous improvements to those systems (Melles, et al., 2021; Holman, et al, 2019; Meyer, et al, 2022). This work shows how clinical and translational science organizations like MICHR can contribute to the emergence of learning health systems by evaluating the infrastructure of academic medical centers designed to facilitate participant recruitment into research (Lopez et al., 2025). DISCUSSION/SIGNIFICANCE OF IMPACT: This study responds to an enduring need for more research into the ways research institutions like MICHR can increasingly provide investigators with better infrastructure and tools, such as access to population-based data for real-time adjustments to their clinical and translational research studies.

235

From barriers to breakthroughs: Addressing accrual barriers in pragmatic EHR-embedded trials

Bethany Kwan[1], Bethany M. Kwan[2,3,4], Cecilia Low Wang[5], Lindsay A. Lennox[2,3], Sarah V. Kautz[3], Adit A. Ginde[2,3], Matthew Mimnall[6], Andrew Nicklawsky[7], Goldie Komaie[8], Christine Velez[8], Aaron Barbour[2], Neil Aggarwal[9], Marjorie McIntyre[10], Ronald J Sokol[1,10] and Thomas W. Flaig[1,2,7,11,12]
[1]University of Colorado at Denver; [2]Department of Emergency Medicine, University of Colorado School of Medicine, Aurora, CO; [3]Colorado Clinical and Translational Sciences Institute, CU Anschutz, Aurora, CO; [4]Adult & Child Center for Outcomes Research & Delivery Science, University of Colorado Anschutz, Aurora, CO; [5]Division of Endocrinology, Metabolism, and Diabetes, Department of Medicine, University of Colorado School of Medicine, Aurora, CO; [6]UCHealth, Aurora, CO; [7]University of Colorado Cancer Center, Aurora, CO; [8]The Evaluation Center, University of Colorado Denver, Denver, CO; [9]Division of Pulmonary, Allergy, and Critical Care Medicine, University of Colorado School of Medicine, Aurora CO; [10]Office of the Vice Chancellor for Research, University of Colorado Anschutz, Aurora CO; [11]Section of Pediatric Gastroenterology, Hepatology, and Nutrition, Department of Pediatrics, University of Colorado School of Medicine, Aurora, CO and [12]Division of Medical Oncology, Department of Medicine, University of Colorado School of Medicine, Aurora, CO

OBJECTIVES/GOALS: Trial accrual via electronic health records (EHRs) are limited by workflow and communication issues. We used a root cause analysis to identify barriers and guide changes in a pragmatic trial of metformin vs lifestyle change for prostate cancer. The goal is to evaluate strategies to increase accrual. METHODS/STUDY POPULATION: We previously conducted a mixed-methods root cause analysis to examine barriers along the enrollment pathway. The study required two consents: 1) prostate cancer research consortium participation and 2) trial specific. We assessed the trial's EHR-embedded consent workflow and Best Practice Alert (BPA) implementation and aggregated and harmonized data from multiple EHR sources to reconstruct the full enrollment pathway in a CONSORT diagram. We conducted semi-structured interviews with eligible patients (n = 10) and engaged clinicians (n = 4). Based on interview findings and enrollment pathway insights, the study team designed and evaluated impact of several accrual enhancement strategies. RESULTS/ANTICIPATED RESULTS: We identified two types of feasible accrual enhancement strategies: 1) patient-focused, including a) tracking consent status in the enrollment pathway report; b) proactively messaging patients with upcoming visits about consent; and 2) clinician-focused, including a) tailored EHR-based messages before eligible patient visits; b) targeted education; and c) BPA optimization to improve reach to appropriate clinicians. In the 6 months prior to strategy implementation, enrollment averaged 0.33 patients/month. In the 6 months post-implementation, enrollment increased to an average of 3.17 patients/month.

https://doi.org/10.1017/cts.2026.10436 Published online by Cambridge University Press