

incorporated the CP approach. Teams were able to streamline and simplify Logic/CP models. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Through capacity-building and mentored exercises, an innovation team was able to infuse CP thinking into the evaluation of their ongoing program. The CP approach to design and evaluation maps progress and indicators across the life of a program from initial activities to its ultimate impact.

4079

Lessons learned from implementing Quality Improvement (QI) in academic clinical research setting

Chin Chin Lee¹, DUSHYANTHA JAYAWEERA¹, Marjorie Godfrey², Matthias Salathe³, Jonelle Wright¹, and Ralph L. Sacco¹

¹University of Miami Clinical and Translational Science Institute; ²Dartmouth Institute; ³University of Kansas Medical Center

OBJECTIVES/GOALS: We describe here the implementation of a pilot Quality Improvement (QI) program in clinical research processes in order to facilitate translation from bench to community. This presentation will also discuss challenges encountered by the research teams during the implementation of QI activities. **METHODS/STUDY POPULATION:** Miami CTSI collaborated with University of Kansas' CTSA to test the implementation of a QI program for clinical research processes. The program has a duration of 1 year and consists of multi-modal training and coaching sessions with different research teams. Six teams comprising of Principal investigators, clinical coordinators, and regulatory specialists participated in the program based in applied clinical microsystem theory science. Team coaches and teams worked together to assess current processes, test new and improved processes, and standardize and disseminate applicable best practices of the QI program. **RESULTS/ANTICIPATED RESULTS:** The implementation of QI activities in large clinical research settings poses numerous challenges for the research team. We will present survey results from the coaching sessions and follow on feedback from the different teams involved in the program to implement the QI activities. We will describe the modifications and adjustments made to the original conceptual framework of QI program in order for it to be applicable and feasible for the settings of the University of Miami. We will provide recommendations for other academic clinical research centers that are considering implementing a QI program. **DISCUSSION/SIGNIFICANCE OF IMPACT:** The successful adaptation of a QI process to implement in academic clinical research settings relies on early engagement of the institution leadership, careful selection of team members, as well as developing communication skills to enhance team dynamics as a clinical research unit.

4134

Report from the research trenches: A mixed-methods approach to investigation of how recruitment methods, culture and collaboration impact clinical trial accrual

Kitt Swartz¹, Meredith Zauflik¹, Adrienne Zell¹, Cynthia Morris¹, and David Ellison¹

¹Oregon Health & Science University

OBJECTIVES/GOALS: The research project aimed to understand the perceived effectiveness of research recruitment methods, including informatics tool utilization, so that best practices can be established and outcomes measured longitudinally. **METHODS/STUDY**

POPULATION: The mixed-methods study was conducted by the Oregon Clinical and Translational Science Institute, the CTSA at Oregon Health and Sciences University. A survey, clinical trial accrual data, and interviews were used to assess the study aims. The survey asked about utilization and value of specific recruitment tools and methods. Accrual data was obtained from the clinical trial management system and analyzed using parameters from the CTSA "Accrual Metric". The metric was calculated for clinical trials enrolling during 2017. Interviews were conducted with researchers identified by the survey and over or under-enrolled accrual data, and inquired about recruitment facilitators and barriers. **RESULTS/ANTICIPATED RESULTS:** The most frequently mentioned facilitator of recruitment was direct patient contact, either in the healthcare setting (58.4% of survey respondents) or through patient outreach (32%). A lack of resources was considered a key barrier (21% of survey respondents) and a stated need (27%). Interview data expanded on these findings, as 23% of interviewees indicated a collaborative culture, which includes clinic integration, was key to recruitment success. Additionally, 20% of interviewees identified resources (i.e. funding, staff, time) as their greatest need. Notably, 13% of studies with an accrual ratio of "0" had frequent staff turnover. **DISCUSSION/SIGNIFICANCE OF IMPACT:** This approach allowed for a uniquely targeted analysis of accrual facilitators and barriers. Use of the CTSA accrual metric identified high-value interview respondents and will allow for investigation into additional accrual questions, such as the impact of funding sources and departmental factors.

4014

Results of a Formative Evaluation of the Cardiopulmonary Vascular Biology (CPVB) Center of Biomedical Research Excellence (COBRE)

Judy Kimberly¹, Sharon Rounds, MD¹, Elizabeth O. Harrington¹, and Susan McNamara²

¹Brown University; ²Ocean State Research Institute

OBJECTIVES/GOALS: Results of a formative evaluation of the CardioPulmonary Vascular Biology (CPVB) COBRE will be presented. Of interest were the quality of the overall program, satisfaction with training, mentoring, and services offered, mechanisms for communication, and effectiveness of the collaboration between junior investigators and their mentors. **METHODS/STUDY POPULATION:** Integral to this evaluation was the creation of questionnaire for junior investigators to complete that addressed four domains: 1) relationship with their mentor, 2) research self-efficacy, 3) administrative and specialty cores value, and 4) satisfaction with events and operations of the COBRE. The two co-principal investigators, program manager, and evaluator developed the 34 items comprising this instrument. The questionnaire was administered online and all eight of the current junior investigators completed the questionnaire. **RESULTS/ANTICIPATED RESULTS:** Participants were mostly satisfied with the mentoring they were receiving and the operational services of the Administrative and Lab Cores. In terms of training preparedness, these participants felt they were not as prepared as they would like for making adequate progress as an academician and did not feel prepared for managing a lab. Interestingly, these participants felt they were most prepared to develop collaborations with scholars and professionals from other disciplines, but stated they felt they were not as prepared in their abilities to build scientific collaborations. **DISCUSSION/SIGNIFICANCE OF IMPACT:** Because a primary foci of COBRE grant mechanisms is the development of junior level investigators, evaluating their skills, mentoring experiences, and the usefulness of services is