MEDICAL SCHOOL
UNIVERSITY OF MICHIGAN

Capstone for Impact Submission | GY2020

Project Title: Characterizing the facilitators and barriers to the implementation of RADAR trial for Hospital Elder Life Program (HELP)-based interventions

Student Name(s): Shirley Yang

Advisor Names(s): Philip Vlisides, MD

Branch: Procedures Based Care

Path of Excellence: Scientific Discovery

If this project can be continued by another UMMS student, please include your contact information or any other details you would like to share here:

Summary: Delirium is a common but distressing complication after surgery, especially in the elderly patient population. The Hospital Elder Life Program (HELP) is a patient-care program that has been shown to reduce the incidence of delirium in patients through social and behavioral interventions. At Michigan Medicine, there has been no system in place for the triage of elderly postoperative patients to HELP. To remedy this, a randomized controlled clinical trial, Recommendations and Alerting for Delirium Alleviation in Real-Time (RADAR), is currently being done to implement and evaluate the efficacy of a clinical decision support system that sends automated pages to HELP, as well as family members and caretakers, with the goal of reducing the risk of delirium in postoperative elderly patients. The paging system works to triage elderly postoperative patients to HELP and to enhance the scheduling of their interventions to better prevent delirium. As part of the trial, the facilitators and barriers to trial implementation for HELP-based interventions will be characterized.

Methodology: Facilitators and barriers to trial implementation will be elucidated through online surveys and focus groups with HELP volunteers. The survey will include Likert-scale questions to report views on teamwork, safety, collaboration, resource availability, and collegiality. Open-ended questions are also provided for HELP volunteers to make additional comments. This survey will be done before the trial begins and again at 6 and 12 months after system implementation. Within a month of each of these surveys, a focus group will be held with HELP volunteers to further elucidate the facilitators and barriers to trial implementation. All responses will remain anonymous.

Results: TBD

Conclusion: TBD

Reflection/Impact Statement:

With no prior knowledge or experience in designing and conducting clinical trials, I have found this project to be very challenging. I am still learning about implementation science and the various aspects of clinical trials that can be studied in addition to the trial itself. However, I am grateful for this opportunity to learn and

experience a new type of research. Hopefully by the end of the project, I will achieve the goals of the project, as well as have a better understanding of how clinical trials work.

In terms of work to be done, the first set of survey and focus group data have been collected from before the start of the trial. They will be analyzed in the upcoming month or two for the results, after which conclusions will be made for this time point. The project spans over a year with data collection at 6 months and 12 months after the beginning of the trial. Thus, this project will likely be continued into my residency or handed off to another UMMS student. My capstone will focus on the initial results from before the start of the clinical trial.

This project will have an impact on the clinical trial it serves by helping to improve the implementation of the paging system in the trial. It may also reveal larger system issues in the workflow of HELP volunteers in their goal to reduce delirium in patients, which can also be addressed in the future. Thus, indirectly, this project will have an impact on elderly postoperative patients to reduce their risk of delirium.