Impact of Transitions of Care Pharmacist Interaction on 30 Day Readmission Rates in Medium and High-Risk Patients

Emily Mueller, Evan Williams, Sarah Mester, The University of Kansas Health System, 4000 Cambridge St Mailstop 4040 Kansas City, KS 66160 emueller4@kumc.edu

Background: Hospital readmission rates affect both patient morbidity and mortality and have financial impacts. A variety of scoring tools exist to categorize risk of 30-day readmission including the LACE index, 8Ps, and the HOSPITAL Score, but none are specific to pharmacy criteria. The MADE Score was created at The University of Kansas Health System to evaluate patients for 30 day readmission risk based on medication related risk factors. Previous research evaluated the MADE Score's ability to predict 30 day readmissions when categorized as low, medium, or high risk. Patients with medium risk were found to be three times more likely to readmit than low risk while high risk patients were seven times more likely. This quality improvement project aims to assess if TOC pharmacist intervention addressing risk factors identified by the MADE score in medium and high risk patients lead to a reduction in 30-day readmission rates.

Methods: This is a prospective, controlled, single center quality improvement study that occurred from January 11, 2021 to April 11, 2021 at a large, academic medical center. Both the control group and intervention group received admission and discharge medication reconciliation and the MADE Score assessment. The control received the current standard of care provided at discharge. Those in the intervention group who were categorized as medium or high risk on the MADE Score received the customized transitions of care plan created to address identified risk factors.

Conclusion: Initial results from January and February include 224 patients who received the MADE Score (101 patients in the intervention group, 123 in the control group). Of those, 18 (17.9%) and 24 (19%) readmitted from the intervention and the control groups, respectively ($p = 0.747$). Data collection will continue through May 11th, at which point the full results will be analyzed.