Background & Purpose: In response to the Value Based Purchasing initiative, recent emphasis on cost containment in healthcare has focused attention on the reduction of avoidable patient days and readmissions.5,6 As a result, hospitals have a renewed effort in efficient selection of appropriate discharge destinations. Moreover, in 2015, CMS has implemented a new domain, the efficiency score, into hospital performance metrics driving administrators to more closely evaluate a patient’s readiness for discharge. Evidence supports the efficacy of preadmissions predictor tools in decreasing length of stay, however, these tools do not account for the patient’s post-operative impairments which serve as an integral driver in determining safe post acute discharge destination. The purpose of this case study is twofold: to explore the impact of a post-operative scoring method for selecting elective hip and knee surgery patient discharge destination that incorporates both functional performance and psychosocial variables, and to determine the tool's impact on readmissions rates.

Case Description: This case is a retrospective cohort study of 979 total participants with qualifying elective total hip or knee arthroplasty discharged during two study periods. The first study period includes 519 patients (Group A) discharged between Nov 2013 and Oct 2014 when a post-operative predictor tool was utilized. The second period includes 460 patients (Group B) from Nov 2012 through Oct 2013 when the predictor tool was not utilized. Six metrics were utilized in the predictor scoring tool. Each metric was given a score 0,1,2, or 3 based on established category benchmarks and a total score was calculated. A score of 6 or less was a trigger for extended care placement at discharge.

Outcomes: In Group A, 71.02% of patients were discharged home and 28.98% discharged to an extended care facility. 1.73% were readmitted. When applying the predictor tool, 83.5% of Group A patients scored greater than 6 indicating they could have been discharged to home. When applying the predictor tool to Group B, 83.48% could have been discharged to home, and 16.52% scored less than 6. 2.33% were readmitted. For Group B, 55% of readmissions did not go to the recommended destination whereas Group A 100% of readmits went to the predicted destination.

Discussion: A greater percentage of patients in both groups were determined to be
capable of discharge to home when applying a predictor tool that considers the patient's postoperative functional performance. Additionally, the number of 30 day readmissions related to a noncompliant discharge destination decreased during predictor tool utilization compared to the discharges without the tool. The outcomes of this case study suggest that utilization of a post-surgical predictor tool may be beneficial in determining the appropriate discharge placement with an added potential benefit of reducing readmissions rates for the hospital.