Are We Ready for Bundled Payments for Major Bowel Surgery?

INTRODUCTION
Healthcare spending in the United States is projected to increase to 19.7% of GDP by 2026 [1]. In 2010, the Affordable Care Act (ACA) was passed with an aim to reduce national healthcare spending and improve the overall quality of care [2]. In response to the ACA, the Center for Medicare and Medicaid Innovation created the Bundled Payments for Care Improvement (BPCI) initiative and introduced bundled payments as an alternative payment model for hospitals. In January 2018, the Centers for Medicare & Medicaid Services (CMS) announced a new voluntary episode payment model for major bowel surgery with the goal of aligning incentives across participating healthcare providers, reducing healthcare costs, and improving the overall quality of care.

PURPOSE/OBJECTIVE
The purpose of this study was to examine the financial impact of bundled payments for major bowel surgery.

METHODS
An institutional administrative database was retrospectively queried for all patients who underwent major bowel surgery between July 2016 and June 2018. Procedures were categorized using the MS–DRG coding which classifies patients into groups based on Major Complications and Comorbidity (MCC) and Complications and Comorbidity (CC). The 3 groups included in this study were: MS–DRG 329 (Major Small & Large Bowel Procedures with MCC), MS–DRG 330 (Major Small & Large Bowel Procedures with CC), and MS–DRG 331 (Major Small & Large Bowel Procedures without CC/MCC).

RESULTS
A total of 745 patients underwent 798 procedures during their index admission. One hundred and twenty-five procedures (15.7%) were performed in the acute setting. The mean age was 62.1 years, mean BMI was 29.2 kg/m², and 54% of patients were female. The median length of stay was 4.0 days, with a range of 1 to 77 days. Forty-six patients (6.2%) required 53 reoperations during their index admission.

Discharge disposition was as follows: 71.8% were discharged home, 15.7% required home health nursing services for an average of 12.5 days, and 12.5% were discharged to a post-acute care facility for an average stay of 38.5 days.

The mean hospital cost was $18,525, with a range of $3,008 to $303,411. Hospital costs were higher for procedures performed in the acute setting compared to elective cases ($27,551 vs. $16,993, p<0.01). The mean charge for home health nursing was $217 per day and the mean charge for a post-acute care facility was $423 per day.

Sixty-six (8.6%) patients had a total of 90 readmissions. The mean cost of a readmission was $12,859.

CONCLUSIONS
Patients undergoing major bowel surgery are often a heterogeneous population with varied pre-existing comorbid conditions. These patients require a high level of complex care and hence greater hospital resources which can have a tremendous impact on hospital costs.

References

Table 2: Subsets analyses based on MS–DRG coding for DRG scores, length of stay, percentage of patients discharged to post-acute care facilities, hospital costs for the index admission, 90-day readmissions, and hospital costs for readmissions.