

Does same-hospital readmission rate correlate with all-hospital readmission rate?

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INTRODUCTION: In October of 2012, Medicare’s Readmissions Reduction Program took effect to reduce compensation for excess readmissions rates. Although the provision penalizes readmission to any hospital, many institutions are only able to track same-hospital readmissions. This study investigates whether same-hospital readmission rates serve as a viable surrogate for all-hospital readmission rates.

METHODS: We used 2007-2008 Medicare data to evaluate hospital rates of 30-day readmission on fee-for-service beneficiaries who underwent one of three common surgical procedures (n=560,920). Our analytic population included the 66,890 patients (12%) with at least one readmission within 30 days of their index procedure. The same-hospital readmission subset included 42,713 patients (64%). We used hierarchical logistic regression to calculate hospital risk-adjusted rates of readmission. After stratifying hospitals into quintiles by same-hospital and all-hospital readmission rate, we compared rankings using Spearman’s rank correlation and weighted kappa analysis.

RESULTS: The Spearman’s rank correlation coefficient between same-hospital rankings and all-hospital rankings was 0.32 (p-value<0.001) and weighted kappa was 0.19 (p-value<0.001) indicating a weak correlation between rates. Of the institutions in the worst performing quintile of same-hospital readmission, 95% were reclassified when evaluating all-hospital readmission. Of hospitals ranked in the top quintile of same-hospital readmission, 62% were redistributed to a different quintile of all-hospital readmission, with 11% of ranking in the worst quintile.

CONCLUSIONS: In evaluating potential performance under Medicare’s new Readmissions Reduction Program, same-hospital readmission rates are unreliable for predicting all-hospital readmissions rates. To prevent payment penalties, hospitals will require novel approaches to accurately tracking post-operative readmissions in real-time.

Assessing the care of geriatric trauma patients: use of quality indicators

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INTRODUCTION: The geriatric population is expanding, and trauma services care for more of these injured patients at higher risk for worse outcomes. Using process-based quality indicators (QI) developed by our group, we assessed quality of care provided to geriatric trauma patients based on adherence to QI and the association with risk-adjusted outcomes.

METHODS: Prospective study of consecutive patients >65 y/o admitted to a Level I trauma center (2007-2010). 98 indicators reflect seven domains of care (Table). Adherence was determined through chart abstraction, and rates >85% defined good quality of care. Association of composite quality score (QI met/QI eligible per patient) with length of stay (LOS), inpatient morbidity, and discharge location were assessed using multivariate logistic regression.

RESULTS: 77 geriatric trauma patients with mean age 77.4±8.1 years, Charlson Comorbidity Index 4.7±2.5, and 80% suffered motor vehicle accident or fall. Mean Injury Severity Score was 13.2±9, median LOS was 6 days (IQR 3-14), and 26% had an inpatient morbidity. Operative Care had highest adherence rate while domains on patient/provider communication, such as Patient Care Preferences during Hospital Admission and Hospital Discharge, were the lowest (Table). Composite quality score is associated with a trend towards shorter LOS (p=0.08), but not to overall morbidity or discharge to home.

Domains of Care	QI eligible	QI met	% Adherence (95% confidence interval)
N			
Operative care during hospital admission	308	266	86.3 (76.3, 97.4)
Emergency department	586	456	77.8 (70.8, 85.3)
Continuity of care	229	158	69 (58.7, 80.6)*
Geriatric-specific care	485	293	60.4 (53.7, 67.7)*
Assessment and care during hospital admission	673	402	59.7 (54, 65.9)*
Patient care preferences during hospital admission	149	70	47 (36.6, 59.4)*
Hospital discharge	286	51	17.8 (13.3, 23.4)*
Total	2716	1696	62.4 (59.5, 65.5)*

*95% CI did not include 85%, ie. cut-point defining good quality of care.

CONCLUSIONS: Adherence rates were low for indicators on communication between geriatric trauma patients and providers, and transitional care. Overall adherence may shorten LOS, but additional work is needed. Further efforts will focus on operationalizing feasible, patient-centered indicators promoting integration of acute treatment with after-discharge care.

The cost of major surgery in the sarcopenic patient

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INTRODUCTION: Sarcopenia is associated with poor outcomes following major surgery. There is currently no data regarding the financial implications of providing care for these high-risk patients.