Regional Heterogeneity Found in Compliance with Price Transparency Reporting of Medicare Severity-Diagnosis Related Group Identifiers for Thoracolumbar Spinal Fusion among Top 100 US Hospitals for Orthopaedics

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INTRODUCTION: While the Centers for Medicare & Medicaid Services (CMS) mandated US hospitals to provide chargemaster data with each standard charge of items and services paired with a diagnosis related group (DRG), CPT, or other payer identifier, there likely exists substantial heterogeneity of this information due to the lack of regulation of which payer identifier to be included. Furthermore, while certain identifiers may aid in hospital accounting, they may not add value to the consumer. The Medicare Severity-Diagnosis Related Group (MS-DRG) identifier conveniently provides overall cost information for many diseases and procedures. In this study, we examined the rate at which the top 100 hospitals for orthopaedic surgery reported chargemaster data and the rate at which MS-DRG data for thoracolumbar spinal fusion was presented.

METHODS: *U.S. News & World Report* 2021-2022 top hospital rankings was queried to identify the top 100 hospitals for orthopaedic surgery. Each hospital's chargemaster data was evaluated for inclusion of MS-DRG codes 459 (spinal fusion except cervical with major complication or comorbidity [MCC]) and 460 (spinal fusion except cervical without MCC). Standard charges were categorized as gross standard (GSC), insurance negotiated (IC), or variable (VC, values dependent on operative time or length of stay) charges. Additionally, this characterization was analyzed in each of the major American regions – the Midwest, Northeast, Southeast, Southwest, and West – to determine whether any regional variability existed.

RESULTS: Of the 100 hospitals, 98 listed chargemaster data in a machine-readable file. We encountered technical difficulties due to file type or size with 24 hospitals, which were not evaluated. Of the remaining 74, 38 hospitals included MS-DRG 459 (spinal fusion except cervical with major complication or comorbidity [MCC]). Of these 38 hospitals, 28 listed GSC (73.7%), 6 listed IC (15.8%), and 4 listed VC (10.5%) (Table). Mean GSC for MS-DRG 459 was $262,694.69. These charges ranged from $50,043.35 to $647,644.00. Fifty hospitals included MS-DRG 460 (spinal fusion except cervical without MCC). Of these 50 hospitals, 35 listed GSC (70%), 7 listed IC (14%), and 8 listed VC (16%). Mean GSC for MS-DRG 460 was $147,872.48$23.813.05 to $404,982.00]. These charges ranged from $23.813.05 to $404,982.00. Listed charges varied by region (Figure). The hospitals in the Northeast were the least uniform with pricing presentation, but it should be considered that the Northeast region consisted of the greatest volume of hospitals of all the regions examined.

DISCUSSION AND CONCLUSION: There is regional heterogeneity in inclusion and presentation of charges associated with MS-DRG related to thoracolumbar fusion. True price transparency and patient benefit relies on efforts to create uniformity in chargemaster reporting, especially in identifiers like MS-DRG, that provide a bundled cost for a given diagnoses or procedure, making it easier for patients to estimate and compare costs. Therefore, including MS-DRG information in the chargemaster will increase price transparency more so than inclusion of pricing for each line-item.

Chargemaster Data		
Chargemaster included?	98/100 (98%)	
Technical Difficulty	24/100 (24%)	
Accessible Chargemasters	74/100 (74%)	
	MS-DRG 459	**MS-DRG 460**
MS-DRG Included?	38/74 (51.4%)	50/74 (67.6%)
Gross Standard Charges (GSC)	28/38 (73.7%) (mean = $262,694.69) (range: $50,043.35 - $647,644.00)	35/50 (70%) (mean = $147,872.48) (range: $23,813.05 - $404,982.00)
Insurance-based Charges (IC)	6/38 (15.8%)	7/50 (14%)
Variable/No Charges (VC)	4/38 (10.5%)	8/50 (16%)

Table: Variability in Chargemaster Data and MS-DRG 459 and 460 Presentation

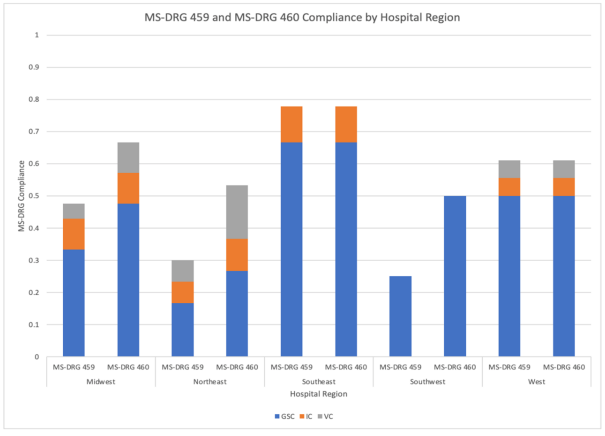

Figure: MS-DRG 459 and 460 Compliance and Formatting by Hospital Region