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CORR Insights®: Variation in Resource Utilization for Patients With Hip and Pelvic Fractures Despite Equal Medicare Reimbursement

Lisa K. Cannada MD

Where Are We Now?

Physicians in every medical specialty should be mindful of Medicare's ever-shifting reimbursement updates, processes, and

trends. Orthopaedics is certainly not immune to these changes. For example, as trends in stabilization of hip fractures become more apparent, [1, 8] so too do the Current Procedural Terminology (CPT) codes for hip fracture fixation, which are not dependent upon implant selection by the surgeon.

For any given injury, there are unique patient comorbidities and issues affecting treatment. In the current study, Grauer and colleagues discuss the variation in resource management for hip and pelvic fractures. The Diagnosis-related Group (DRG) for those diagnoses, DRG-536, encompasses a variety of patients whose treatment and use of resources can be substantial. In addition, the hospitals that treat patients under this DRG vary from small, rural facilities

to large Level 1 Trauma Centers. This study evaluated the National Trauma Data Base for patients 65 years-old and older with hip, pelvic and acetabular fractures. Thus, every patient was treated at a trauma center and was part of the trauma registry.

The results in this study may not reflect the variation in payments for the 536 DRG at rural community hospitals and the multiple nontrauma centers across the United States. With hip fractures, geriatric multidisciplinary services have been demonstrated to improve outcomes, decrease costs, and influence length of stay [5, 7, 12, 13]. Thus, the hospitals with this service can then result in "overpayment" due to increased efficiency.

The authors discussed how orthopaedic surgeons have completed studies which directly affect DRGs and payment. For example, orthopaedic surgeons have demonstrated differences in resource utilization between primary and revision total joint arthroplasty [3, 4]. In response, the Centers for Medicare & Medicaid

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L. K. Cannada MD (✉)
Department of Orthopaedic Surgery,
Saint Louis University, 635 Vista Ave.,
7th Floor-Desloge Tower, St. Louis, MO
63110, USA
e-mail: LCannada@slu.edu

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Services (CMS) made changes, resulting in two different DRGs for primary (DRG 544) and revision hip and knee (DRG 545) arthroplasties. This makes sense in multiple areas: Patient care, surgeon effort, and hospital resources—all of which result in more reasonable bundled payments. The work of Grauer and colleagues may be the first steps to doing likewise for DRG 536.

Where Do We Need To Go?

With DRG 536, the deficiencies in knowledge include the statistics on length-of-stay, ICU and ventilator time in different patient populations, lack of delineation of fracture type, and treatment and inclusion of nontrauma centers. This study had a limited number of operative pelvic fractures, yet in many trauma centers, the patients with these types of injuries are often the most-severely injured [6, 9, 10]. Of all fractures in this DRG, only operative pelvic fractures can represent life threatening orthopaedic injuries; the remainder of injuries in this category are function threatening. Future studies need to fill in these gaps.

Database studies are becoming increasingly popular. It is important that orthopaedic surgeons familiarize themselves with the patient population and hospitals participating in these

databases. This paper utilized the National Trauma Data Bank, representing a detailed evaluation of the patients treated with hip fractures at trauma centers. The authors made this study stronger with their use of the Charlson Comorbidity Index, hospital teaching status, hospital size, and geographic region. Thus, these results can be compared should other studies be completed to drive change in the DRG 536.

Orthopaedic surgeons commonly treat patients 65 years of age or older with non-and minimally displaced pelvic fractures from ground-level falls. However, the treatment of lateral compression pelvic fractures varies widely [2]. Fracture type and treatment were not featured in the current paper, but are two variables that should be included in future studies.

How Do We Get There?

The success of the American Association of Hip and Knee Surgeons (AAHKS) in changing the DRG for hip and knee arthroplasty into primary and revision codes is an example of how research can influence change. Well-designed multicenter studies that identify injury variables (such as high-versus low-energy), fracture types, and subsequent treatments may supplement database studies like those of

Grauer and colleagues to achieve the change we need. The foresight and planning of specialty societies would be crucial for success. Grauer and colleagues mentioned that the AAHKS has a Bundled Payment Task Force for evaluation of crucial issues with the eventual goal of change in payment structures. The leaders of other specialty societies should consider advocacy to be important for conditions they treat.

Future studies on DRG 536 might separate life-threatening pelvic fractures from function-threatening osteoporotic fractures. Multicenter centers would provide better-quality evidence to drive change. In addition, with elderly hip fractures, the posthospital rehabilitation can considerably affect healthcare costs. The authors indicated that by using the Patient Protection and Affordable Care Act, it is possible to create new models that expand bundled payments to include services outside of the initial hospitalization.

Currently, geriatric hip fracture from a ground-level fall and a high-energy traumatic pelvic or acetabular fracture fall under the same DRG 536. But these injuries have considerably different postacute treatment options. Patients with high-energy trauma injuries will likely transition to a rehabilitation facility versus an acute facility for a patient with a hip

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fracture. These injuries should not be under the same DRG.

With the population aging, we will likely see more fractures—not just hip fractures, but proximal humerus fractures and wrist fractures as well. Further analysis of these DRGs could be completed to minimize payment disparities. The work done by Grauer and colleagues is important, but the key is determining what happens next. Any reader of this article can be a change agent; we all can promote improvements to CMS's approaches based on the information presented in this study. Let's stand up and advocate for issues that impact our practices.

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