Appropriate Use of the 22-Modifier Does Not Improve Payment in Orthopaedic Trauma and Fracture Care

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Purpose: The 22-modifier in surgical billing allows the surgeon to request increased payment for a given procedure due to increased complexity. The purpose of this analysis was to critically evaluate the effects on payment related to the use of the 22-modifier in complex periarticular trauma. We chose four complex surgical procedures including open treatment of acetabular, elbow, tibial plateau, and pilon fractures and hypothesized that the 22-modifier is an effective method for receiving higher payment in a timely and cost-effective manner.

Methods: All operative procedures billed by the orthopaedic trauma service at an urban, Level I trauma center were evaluated from September 2007 to November 2011. Billing data for the following CPT codes were extracted: open treatment acetabular fracture, open treatment elbow fracture, open treatment pilon fracture, and open treatment tibial plateau fracture. Data were then stratified based on the application of the 22-modifier. Procedures with no payment were excluded. 396 submissions were included in the final analysis. For each procedure group the following variables were assessed: payment to surgeon, days to payment, operative dictation word count, and explanation for requesting higher payment. Correlation of payment amount by payer and number of reasons for use of the 22-modifier was also determined.

Results: Utilization of the 22-modifier was associated with \$331 lower payment for open treatment acetabulum fracture (27226, 27227, 27228), \$330 lower payment for open treatment elbow fracture (24545, 24546, 24586, 24635), and \$72 lower payment for open treatment pilon fracture (27826, 27827, 27828). Open treatment anterior or posterior wall fracture was the only specific code for which there was a significant benefit to applying the 22-modifier (\$479.40, *P* < 0.05). For all procedure groups, a significantly greater operative dictation word count was noted and there was a 14.4% increase in time to payment when the 22-modifier was applied. There was no payment benefit to dictating additional reasons for requesting a greater payment. Payer type statistically significantly affected payment amount using the 22-modifier in the following order from greatest to least: Workers' Compensation, private insurance, Medicare, and Medicaid.

Conclusion: Utilization of the 22-modifier is associated with decreased payment for complex periarticular fracture procedures. Furthermore, it greatly increased the administrative aspects of fracture care such as increased time to payment for many procedures and dramatically increased operative dictation length by word count. Application of the 22-modifier in patients insured through Workers' Compensation may result in increased payment. Routine use of the 22-modifier for complex procedures is not recommended in orthopaedic trauma and fracture care.

See pages 99 - 147 for financial disclosure information.