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May 20th, 12:30 PM

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Zheng H, Li W, Lemay C, Ayers D, Franklin PD. (2016). Translating Comparative TJR Outcomes for Performance Improvement to Guide Surgical Quality Improvement. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/2016/posters/101

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Translating Comparative TJR Outcomes for Performance Improvement to Guide Surgical Quality Improvement

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Background/Purpose

With the CMS decision to publicly report hospital-specific post-operative total joint replacement (TJR) complications and readmissions, orthopedic surgeons need new sources of post-operative outcome data to monitor and improve post-hospital care. The AHRQ funded research program, Function and Outcomes Research for Comparative Effectiveness in Total Joint Replacement (FORCE-TJR), developed methods to capture longitudinal patient-reported outcomes (PROs) and comprehensive post-TJR medical and surgical events, and established a web reporting system to return comparative outcome reports to participating surgeons and hospitals in order to monitor and improve quality and outcomes.

Methods

This national cohort/registry captures post-TJR measures directly from patients in their homes to assure uniform time, completion, and consistency for data comparisons across hospitals. Quarterly updated web reports deliver hospital- and surgeon-specific TJR outcomes compared with those of their peers and risk-adjusted national benchmarks on PROs as well as on post-operative event rates.

Results

Our national cohort enrolled 25,000 patients from 150 diverse orthopedists in 22 US states with varied hospital and surgeon practices. The secure, HIPAA compliant website was established that presents summary and risk-adjusted comparative statistics for primary TJR for all enrolled patients. The website provides a downloadable and printable report and an Executive Summary of key pre-operative patient risk factors, post-operative events, and post-operative PROs enabling the providers to compare their outcomes to the other participating sites. Individual patient reports are available for surgeons with real-time scores and trended outcome data to facilitate patient and surgeon shared treatment decision making.

Conclusion/Implications

A secure reporting website was established to disseminate comparative outcome reports to all participating hospitals and surgeons. Returning comparative outcome data to hospitals and surgeons encourages their active participation in this national registry and allows them to understand their relative performance compared to peers while supporting practice-level quality monitoring and improvement efforts in patient care.