

What Patient-Reported Outcome Should I Use?

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Purpose: As the call for evidence-based medicine has increased, the medical community has placed emphasis on the use of patient-reported outcomes (PROs). However, little consensus exists in the orthopaedic trauma literature with regard to which PROs should be used when studying orthopaedic trauma patients. The purpose of this study was to identify and characterize the use of PROs utilized in the orthopaedic trauma literature.

Methods: All articles from 5 well respected orthopaedic journals (Journal of Orthopaedic Trauma [JOT], The Journal of Bone & Joint Surgery [JBJS], Clinical Orthopaedics and Related Research (CORR), Journal of Hand Surgery [JHS], and the Journal of Shoulder and Elbow Surgery [JSES]) published between 2011- 2015 were reviewed to identify trauma-related publications that utilized at least 1 PRO. Publication year, location of injury, number of PROs used, use of visual analog scale (VAS), and which specific PROs were reported were recorded and analyzed.

Results: A total of 6269 articles were reviewed, 1929 (31%) articles pertaining to trauma. 27% of articles that related to orthopaedic trauma utilized at least 1 PRO. An average of 107 trauma-related studies with PROs were published per year across all 5 journals. There was no increase in PRO use observed across 5 years. An average of 2 PROs were reported per publication. The percentage of trauma studies that included PROs varied by journal. 40% of trauma-related articles published in JSES included PROs, 35% of applicable trauma articles in JHS and JOT, 30% in CORR, and 29% published in JBJS. The most commonly used PROs included: VAS, 30% (n = 164); Disabilities of the Arm, Shoulder and Hand (DASH) score, 30% (n = 161); Constant score, 14% (n = 76); Short Form-36 survey, 11% (n = 58); American Shoulder and Elbow Surgeons Standardized Shoulder Assessment Form (ASES), 8% (n = 45); Mayo Elbow Performance Index, 8% (n = 42), QuickDASH (an abbreviated version of the DASH questionnaire), 8% (n = 40); and the Short Musculoskeletal Function Assessment (SMFA), 6% (n = 34).

Conclusion: The use of PROs in orthopaedic trauma studies represented a minority of publications across major orthopaedic journals between 2011 and 2015. Furthermore, standardization is lacking with the use of a variety of PROs, making comparison between studies challenging. The VAS was the most commonly reported PRO followed by PROs for the upper extremity.