

### Percent of Normal: A Pragmatic Patient-Reported Outcome Measure for the Orthopaedic Trauma Clinic

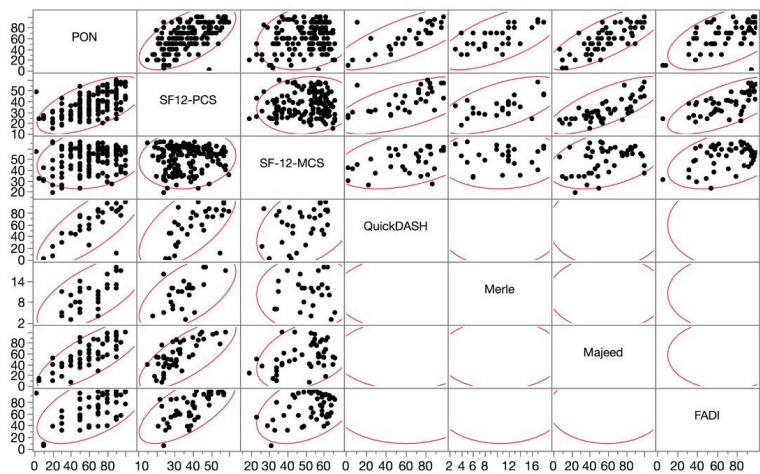
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**Purpose:** The purpose of this study was to compare a single numerical patient-reported outcome measure (PROM) to general health and injury-specific PROMs.

**Methods:** A prospectively gathered orthopaedic trauma PROMs registry was retrospectively reviewed to identify patients with humerus, pelvis, acetabular, and ankle fractures who successfully completed PROMs during a 9-month period. Patients were administered 3 PROMs: the 12-item Short Form (SF-12), an injury-specific PROM (QuickDASH [an abbreviated version of the Disabilities of the Arm, Shoulder and Hand questionnaire] - humerus; Majeed Pelvic Outcome Score (Majeed) - pelvis; modified Merle d’Aubigne score (Merle) - acetabular; Foot and Ankle Disability Index (FADI) - ankle), and the Percent of Normal (PON) PROM, a single numerical PROM that asked, “How would you rate yourself, if 100% is back to normal?” Floor/ceiling effect, convergent validity, and responsiveness of PROMs were assessed.

**Results:** 175 patients with 34 humerus, 54 pelvis, 31 acetabular, and 56 ankle fractures were included. None of the PROMs demonstrated a floor effect. The Merle was the only PROM with a ceiling effect (19%). The PON had a strong correlation with the QuickDASH ( $r = 0.78$ ) and Majeed ( $r = 0.78$ ), a moderate association with the SF-12 physical component summary score (PCS) ( $r = 0.63$ ), Merle ( $r = 0.67$ ), and FADI ( $r = 0.55$ ), and a weak association with the SF-12 mental component summary score (MCS) ( $r = 0.22$ ). The regression coefficient for change in PROM over time, a measure of responsiveness, was greater for the PON, compared to the SF-12 PCS/MCS, Majeed, Merle, and FADI, but not the QuickDASH.

**Conclusion:** The PON is a pragmatic PROM that can be easily administered in clinic by the physician to quickly assess and manage a variety of fractures, avoiding the disadvantages of non-relative general or region-specific PROMs.



The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or medical device he or she wishes to use in clinical practice.