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Traumatic Injury to the Upper Extremity

FUNDING

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raumatic injury to the upper extremity is one of the most common reasons to seek emergency medical care. These injuries can occur in all segments of the population, including working patients. Attempts to correlate outcome with various injury and patient characteristics have not yielded consistent results. However, it has become more apparent that patient-reported outcomes often correlate well with functional outcome and return to work. Valid patientreported outcome instruments (PROs) that allow outcome study standardization and decrease the respondent burden are required.

The purpose of my research is to initiate the development of an upper extremity-specific PRO instrument that correlates with outcome following traumatic injury. Currently, we are using expert panels to elucidate physical function items from existing upper extremity functional outcome metrics to assemble a comprehensive set of outcome questions. Subsequently, we will conduct cognitive interviews with patients who have sustained upper extremity injuries to test the items. The information assimilated in this current qualitative study will be used to develop a standardized PRO for upper extremity injury that will then be suitable for administration in future qualitative studies.

This work is necessarily collaborative in nature, and we are working with Dagmar Amtmann, Ph.D. in the Department of Rehabilitation on this effort. Dr. Amtmann is the director of the University of Washington's participation in the NIH's Patient-Reported Outcomes Measurement Information System, and has extensive experience with psychometric outcomes testing.

RELATED PUBLICATIONS

- 1. DeWalt D A, Rothrock N, Yount S, Stone A A. Evaluation of item candidates: the PROMIS qualitative item review. Med Care, 45:S12-21, 2007.
- 2. MacDermid J C, Richards RS, Donner A, Bellamy N, Roth JH. Responsiveness of the short form-36, disability of the arm, shoulder, and hand questionnaire, patient-rated wrist evaluation, and physical impairment measurements in evaluating recovery after a distal radius fracture. *J Hand Surg [Am]*, 25: 330-340, 2000.
- 3. MacDermid J C, Roth JH, McMurtry R. Predictors of time lost from work following a distal radius fracture. J Occup Rehabil 17: 47-62, 2007.
- 4. Revicki D A, Cella DF. Health status assessment for the twenty-first century: item response theory, item banking and computer adaptive testing. *Qual Life Res* 6:595-600, 1997.
- 5. Rose M, Bjorner JB, Becker J, Fries JF, Ware JE. Evaluation of a preliminary physical function item bank supported the expected advantages of the Patient-Reported Outcomes Measurement Information System (PROMIS). J Clin Epidemiol 61: 17-33, 2008.

OTHER CO-INVESTIGATORS

Dagmar Amtmann, Ph.D.; UW Department of Rehabilitation Medicine