

# SYSTEMATIC REVIEW OF THE USE OF PATIENT REPORTED OUTCOME MEASURES IN STUDIES OF ELECTIVELY-MANAGED HAND CONDITIONS

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## **Aims**

Hand surgery comprises hand trauma and electively-managed conditions, such as osteoarthritis, carpal tunnel syndrome, Dupuytren's disease, and trigger fingers. Electively-managed conditions account for over 100 000 inpatient surgeries a year in the English National Health Service alone, with further procedures in other regions of the UK, or performed on an outpatient basis. Thus, these conditions contribute to morbidity for a large proportion of the population. Besides surgery costs, clinic appointments, hand therapy and splinting all contribute to considerable health service resource consumption.

To quality assure this care and to conduct research, effective outcome measurement is critical. Traditionally, hand surgery outcome measurement has focussed on clinician-centred assessment of constructs like grip strength or finger joint angles. These measures correlate poorly with hand function, and are seldom important to patients. Recently, patient-reported outcome measure (PROM) use has increased in hand surgery. However, consensus of PROM choice appears to be lacking. This systematic review aimed to describe the use of relevant PROMs in clinical research of electively-managed hand conditions.

## **Methods**

A PRISMA-compliant methodology was used. A bespoke search strategy was developed in conjunction with a search strategist, and applied to Medline, EMBASE, CINAHL and PSYCHINFO from 1992 to June 2017. Search results were screened by two authors in parallel. Pre-specified stepwise inclusion criteria were used.

## **Results**

Of 4554 results, 834 met inclusion criteria. PROMs identified included 9 disease-specific, 8 domain-specific and 4 generic/quality of life measures. Across all, the Disabilities of the Arm, Shoulder and Hand (DASH) was the most commonly used. In studies of carpal tunnel syndrome, the Boston Carpal Tunnel Questionnaire was the most commonly used. Time-analysis demonstrated predominance of site-specific

PROMs since 2000, despite a core outcome set recommending the use of a combination of PROMs in 2013.

### **Conclusions**

Various PROMs have been used to study electively-managed hand conditions, with limited consensus. The next stage of this work will be to evaluate the development and validation of the identified instruments.