# Minimal Clinically Important Difference and Substantial Clinical Benefit Values for the 12-Item International Hip Outcome Tool.

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## Abstract

### **PURPOSE:**

To define minimal clinically important difference (MCID) and substantial clinical benefit (SCB) values for the 12-item International Hip Outcome Tool (iHOT-12) in patients undergoing hip arthroscopy for intra-articular pathology.

#### **METHODS:**

This was a retrospective review of prospectively collected data on patients who underwent hip arthroscopy. On initial assessment and follow-up between 335 and 395 days after surgery, subjects completed the iHOT-12 and a categorical self-rating of function (severely abnormal, abnormal, nearly normal, or normal). One-half the standard deviation (SD) of the change in 1-year iHOT-12 scores was used to calculate the MCID. Receiver operator characteristic analysis was performed to determine SCB values. A change in SCB value was determined based on an improvement in the categorical rating of function. Absolute postoperative SCB scores were calculated to determine scores that would be associated with normal function ratings or with abnormal or severely abnormal function ratings.

#### **RESULTS:**

Of 1,034 eligible patients, 733 (71%) met the inclusion criteria. The subjects consisted of 537 female patients (73%) and 196 male patients (27%), with a mean age of 35.3 years (SD, 13 years). At a mean of 352 days (SD, 21 days) after surgery, 536 patients (73%) were in the "improved" group and 197 (27%) were in the "not improved" group. The MCID was 13 points. An SCB change score of 28 points was able to identify patients who improved with high sensitivity (0.79) and specificity (0.72). Scores of 86 points or greater and 56 points or less were the cutoff values found to identify subjects who rated their function as normal and abnormal, respectively, with high sensitivity (0.74 and 0.90, respectively) and specificity (0.82 and 0.86, respectively).

#### **CONCLUSIONS:**

This study provides information to help interpret iHOT-12 scores for a follow-up period ranging between 335 and 395 days with MCID and SCB values of 13 and 28 points, respectively. In addition, a vpatient who scored 86 points or better was likely to have a normal rating of function, whereas a patient with a score of 56 points or less was likely to have an abnormal rating of function.

#### **LEVEL OF EVIDENCE:**

Level III, retrospective comparative study.

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