

Defining Thresholds for the Patient Acceptable Symptom State for the IKDC Subjective Knee Form and KOOS for Patients Who Underwent ACL Reconstruction

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Abstract: BACKGROUND: A clinically meaningful change in patient-reported outcome (PRO) may not be associated with an acceptable state that corresponds to "feeling well," also known as the patient acceptable symptom state (PASS). The PASS thresholds for the International Knee Documentation Committee Subjective Knee Form (IKDC-SKF) and the Knee injury and Osteoarthritis Outcome Score (KOOS) have not been determined for individuals after anterior cruciate ligament (ACL) reconstruction. PURPOSE: To determine the PASS thresholds for the IKDC-SKF and KOOS in individuals at 1 to 5 years after ACL reconstruction. STUDY DESIGN: Cohort study (diagnosis): Level of evidence, 2. METHODS: Individuals 1 to 5 years after primary ACL reconstruction completed a survey that included the IKDC-SKF and KOOS. All subjects assessed satisfaction with their current state by answering the question, "Taking into account all the activity you have during your daily life, your level of pain, and also your activity limitations and participation restrictions, do you consider the current state of your knee satisfactory?" RESULTS: A total of 251 participants (mean age \pm SD, 26.1 \pm 9.9 years) completed the survey at an average of 3.4 \pm 1.3 years after ACL reconstruction. Of these, 223 (89.2%) individuals indicated that they were in an acceptable symptom state (PASS-Y). Analysis of the receiver operating characteristic curve revealed that the IKDC-SKF and each of the KOOS subscales (pain, symptoms, activities of daily living [ADL], sport and recreation [sport/rec], and quality of life [QoL]) were significantly better identifiers of PASS than chance as indicated by the significance of the area under the curves. The PASS threshold (sensitivity, specificity) was 75.9 (0.83, 0.96) for the IKDC-SKF, 88.9 (0.82, 0.81) for the KOOS pain, 57.1 (0.78, 0.67) for the KOOS symptoms, 100.0 (0.70, 0.89) for the KOOS ADL, 75.0 (0.87, 0.88) for the KOOS sport/rec, and 62.5 (0.82, 0.85) for the KOOS QoL. In addition, th