THE USE OF PATIENT REPORTED OUTCOME MEASURES BY PHYSICAL THERAPISTS IN THE PEDIATRIC SPORTS POPULATION

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Purpose: Patient reported outcome measures (PROs) allow physical therapists (PTs) the ability to objectively understand a patients' perception of their symptoms, functional status, and health related quality of life. Although professional organizations have issued recommendations for PRO use, many of these measures were developed and validated within the adult population which may limit their application to pediatric orthopedics. It is currently unknown which measures are being used within this population, and thus the purpose of this study is to evaluate the current use of PROs among pediatric sports PT and determine how PRO information is used in clinical care.

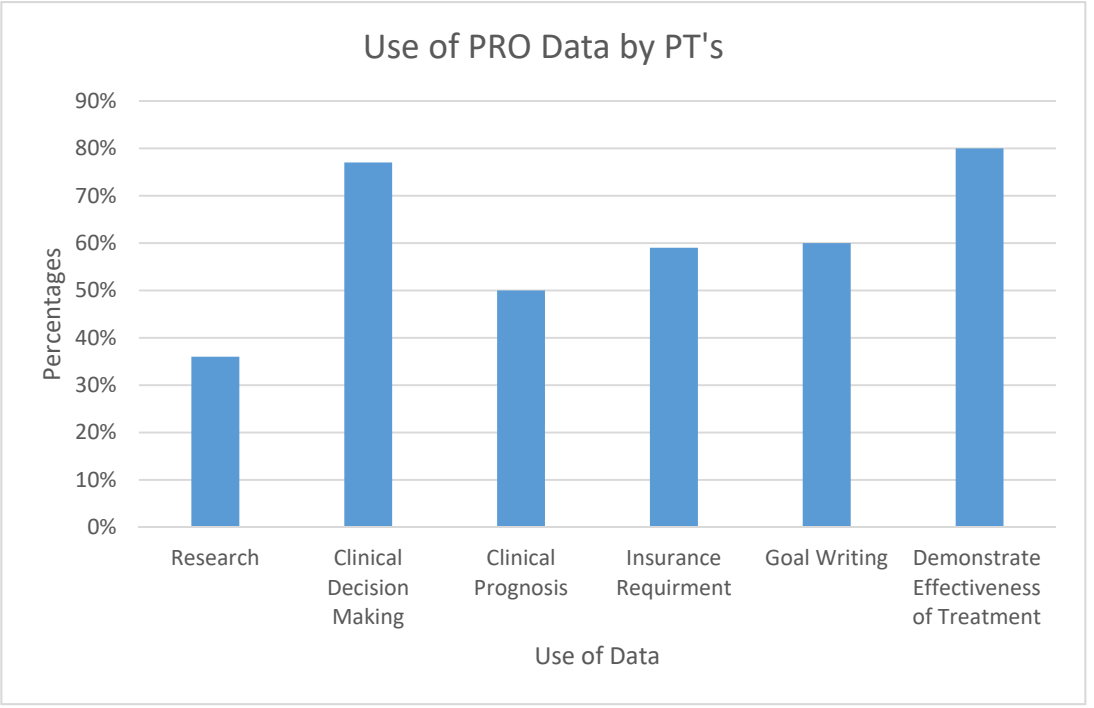
Methods: An online survey, developed in REDCap™, was administered via email to members of the Sports Section Youth Athlete Special Interest Group (YASIG) and the Pediatric Research in Sports Medicine Society (PRiSM), over the course of 8 weeks. The survey was developed and pilot tested by 4 physical therapists and 3 orthopedic surgeons and consisted of 24 possible questions, taking 3-5 minutes to complete. Descriptive statistics and frequency tallies were utilized to analyze the data.

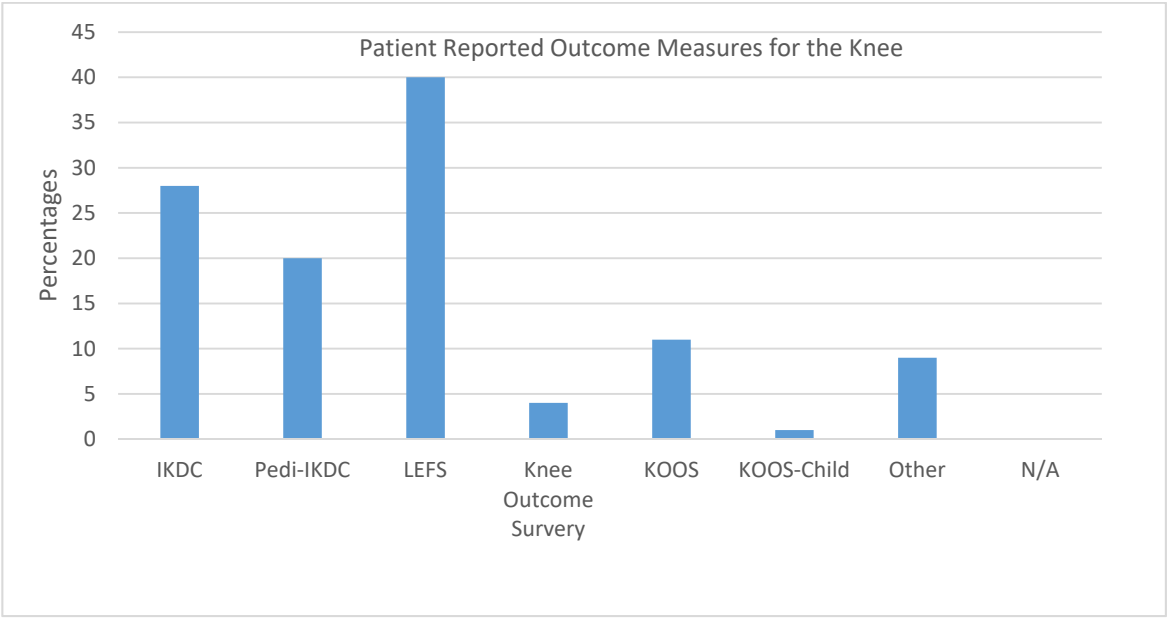
Results: There was a total of 70 respondents (response rate YASIG 17%; response rate PRiSM 90%) who completed the questionnaire in its entirety. There was a wide range of clinical experience with 31% reporting 0-5 years, 23%, 6-10 years, 16%, 11-15 years, and 30% >16 years. The majority (54%) reported working in a hospital based outpatient setting or private practice (24%).
Ninety four percent (n=66) of respondents reported using PROs, with 100% (n=66) of these subjects issuing them at the initial visit, 94% (n=62) at discharge, and 91% (n=60) monthly. The Neck Disability Index (76%, n=50), Oswestry (76%, n=50), and QuickDASH (68%,n=45) were most frequently used for neck, back and shoulder disorders, respectively. The Lower Extremity Functional Scale (LEFS) was the most widely utilized measure for multiple body regions including 74% (n=49) for either hip or knee dysfunction, and 26% (n=16) for ankle. In general, knee disorders demonstrated the highest degree of variability in scale selection with 52% (n=34) using the IKDC, 35% (n=23) using the Pedi-IKDC and 20% (n=13) (using the KOOS).
The information obtained from PROs was used to demonstrate effectiveness of treatment (80%, n=53), inform clinical decisions (77%, n=51), satisfy insurance requirements (59%, n=39), used for goal writing (60%, n=40), and research (36%, n=24). Only 6% (n=4) of PTs indicated that PROs did not impact clinical reasoning within their plan of care. When asked how the information from PROs is used within clinical practice, it was noted that 71% (n=47) of PTs would 'revise physical therapy goals' if scores were either higher or lower than expected and 38% (n=25) would 'refer patient back to the physician' if PRO results showed lack of progress or regression. In addition, 20% (n=13) of PTs noted they utilize the results from PROs to help inform discharge decision making.
When asked regarding barriers to using PROs, PTs reported inadequate time (42%, n=28), difficultly remembering to administer (38%, n=25) and uncertainty regarding which PRO to use (21%, n=14) as the main impediments in using PROs.

Conclusions: Our results indicate that the majority of pediatric sports PTs are using PROs to establish efficacy of treatment, inform clinical decision making and set goals. Inadequate time and indecision with regards to which scale to use, were identified as barriers to use. Knee disorders demonstrated the largest variability in scale use. Interestingly, the LEFS was reported at high frequencies for the hip, knee and ankle joints despite the availability of other joint specific

measures available. The Oswestry and NDI are also used by 76% of respondents despite neither tool being validated in pediatrics. This finding may be due to the absence of any pediatric specific alternative measures.

Clinical Relevance: The Center for Medicare and Medicaid implemented value based purchasing program per the mandate of the Affordable Care Act. The Act established a performance based approach to payment with a goal of ensuring better clinical outcomes and improved patient experience. As a result, there is an increased emphasis on using PROs to demonstrate efficacy and functional improvement. It is reassuring that many PTs are using PROs and using the obtained data to drive clinical care. However, the high variability in scale choice makes comparative outcomes research difficult. In addition, the majority of the PROs used are not validated within the pediatric population and thus may not be appropriate tools for assessing these patients perception of care delivered or even represent their functional/athletic limitations. Given the high prevalence of use and importance to clinical practice, the need for psychometric testing and/or scale development specifically for pediatric sports population is imperative.





The Orthopaedic Journal of Sports Medicine, 7(3)(suppl 1)
DOI: 10.1177/2325967119S00036