

PROMS IN SPORTS MEDICINE

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INTRODUCTION

PROMs in Sports Medicine could be a useful tool to analyze the results of several sports injuries in athletes and sports practitioners, regardless of the involved anatomical site (shoulder, hip, knee, foot, and ankle). Moreover, the athletic population has singular expectations and objectives, differing from the general and sedentary population. Therefore, PROMs could have a more significant role in sports, particularly when designed for this specific population, and the level of physical demand reported, the stress involved in sports practice due to competition level should be used as patient's references. This presentation approaches different types of PROMS commonly used in orthopedics and also discusses the development of PROMS in Sports Medicine.

CHANGE OF ANALYSIS OF OUTCOMES

In the last decade

- analysis has paid more attention to patient's perception of the whole process of treatment;
- Patient Reported Outcomes (PROMs) has come to the forefront in the evaluation of the results of treatment for musculoskeletal ailments
- to ensure that medical management is patient-centered (patient's voice)

WHAT ARE PATIENT REPORT OUTCOMES?

PROMs

- are self-completed questionnaires (subjective evaluation)
- capture patients' point of view on various aspects of medical care
- involve a variety of global, disease-specific, and joint-specific outcomes

THE GOLD STANDARD → quantifying a patient's post-treatment experience

PATIENT REPORT OUTCOMES (PROMs)

RECENTLY → the era of patient centered care

- ↑↑↑ number of PROMs within Medicine and Orthopedics
- to analyze pre- and postoperative differences
- to evaluate musculoskeletal function changes over time and the outcomes of musculoskeletal ailments (wide spectrum),
- the advantages over traditional clinician-based outcome measures

PROMs in Clinical Practice

- International knee documentation committee (IKDC) subjective knee evaluation form
- Disabilities of arm, shoulder, and hand (DASH) and quickdash outcome measure
- Foot and ankle outcome score (FAOS)
- Oswestry disability index (ODI)
- *EQ-5D* EUROQOL health status questionnaire
- *SF-12* SHORT FORM-12 quality-of-life questionnaire
- *UCLA* University of California Los Angeles Activity Score
- Lower Extremity Functional Scale (LEFS)
- Hip Sports Activity Scale (HSAS)
- Hip Outcome Score (HOS)
- Knee Injury And Osteoarthritis Outcome Score (KOOS)
- LYSHOLM

INTERNATIONAL KNEE DOCUMENTATION COMMITTEE (IKDC) SUBJECTIVE KNEE EVALUATION FORM

- 18 questions:
- 7 questions about symptoms,
- 2 about general function,
- 9 about daily activities.

standard documentation system for knee ligament injuries

DISABILITIES OF ARM, SHOULDER, AND HAND (DASH) AND QUICKDASH OUTCOME MEASURE

- 30-item questionnaire
- to evaluate symptoms and physical function of the upper extremity restrictions for both work and physical activities

A new DASH questionnaire with only 11 items (QuickDASH)

FOOT AND ANKLE OUTCOME SCORE (FAOS)

- to evaluate the symptoms and physical limitations related to foot and ankle disorders

EQ-5D EUROQOL health status questionnaire

- health-related quality of life

LYSHOLM

- the correlation of symptoms and functional criteria
- knee ligament injury and TKA

KNEE INJURY AND OSTEOARTHRITIS OUTCOME SCORE (KOOS)

- evaluates the **outcomes for Total Knee Replacement**

SF-12 SHORT FORM-12 quality-of-life questionnaire

- **self-reported health-related quality of life**

PATIENT REPORTED OUTCOMES (PROMs)

- most of these **tools are condition specific** (their quality varies)
- several PROMS have been validated but most of them
 - **are anatomical site or condition-specific,**
 - **and focus on the general population.**

properties of **PROMs and the target patients** → should be clearly defined!!

ISAKOS SPORTS MEDICINE COMMITTEE

Systematic Review on PROMs in SPORTS MEDICINE

Subjective evaluation of postoperative outcomes of sports injuries in regular sports practitioners. Piedade SR, Hutchinson MR, Maffulli N

- did **not present a standardization in how to evaluate** the postoperative outcomes in athletes and regular sports practitioners.
- the **pre-injury status of physical demand** reported, should be of prime importance **in developing PROMS tailored** to this group-athletes and regular sports practitioners.

...a void in PROMS tailored to evaluate the postoperative outcomes regarding the physical and psychological demands of athletes and sports practitioners.

ISAKOS SPORTS MEDICINE RESEARCH

PROMs in SPORTS MEDICINE

- **PROMs tailored** for specific population (athletes and sports practitioners)
- to investigate the outcomes of sports injuries, regardless of the involved anatomical site (shoulder, hip, knee, foot, and ankle).
- **PROMs established four domains** with two questions each (0 to 10)

4 pillar: pre-injury, and post-injury status, patient's expectations of treatment and their evaluations of post-operative care and end-results.

TAKE HOME-MESSAGE

- Sports practitioners and athletes have singular expectations and objectives, differing from the general and sedentary population.
- PROMs play a more important role in sports, mainly when designed for this specific population.
- PROMs in Sports Medicine could be a practical tool to analyze the outcomes of different sports injuries in regular sports practitioners, regardless of the involved anatomical site (shoulder, hip, knee, foot, and ankle).
- the level of physical demand reported as well as the stress involved in sports practice due to competition level should be used as patient's references

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