**Information Statement**

**Principles of Patient Reported Outcome Measures (PROMs) Reporting**

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There has been much written in recent years on the need to improve value in health care, where value is defined as outcomes achieved per dollar spent.\(^1\) In health care, outcomes include both the quality of care delivered as well as the service as experienced by the patient. This has led to great debate over how quality should be defined in healthcare. As Teisberg and Porter\(^1\) have noted in their work, value in any field is defined by the customer, not the supplier. Therefore, it is important to measure outcomes from the patient’s perspective using patient reported outcomes measures (PROMs). Although PROMs have long been used in clinical outcomes research in orthopaedic surgery, efforts to incorporate PRO measurement into routine clinical practice have been more challenging.\(^2\) However, significant progress has been made in developing and validating PROMs for specific musculoskeletal disorders or treatments and those that give a broader picture of general health status. Furthermore, technological advances have made PRO measurement less burdensome for patients and providers.

At the Fall 2014 Council on Research and Quality (CORQ) meeting, significant time was spent investigating this topic, including presentations by a variety of experts in the development, implementation, and use of these measures. Certain key informational items and principles for future development of these measures became clear:

1. **Patient Reported Outcomes are important to patients and providers.** Change in patient reported outcome is arguably the best measure of the "success" of an orthopaedic procedure. Various public reporting and value-based payment programs are beginning to use PROMs as tools for defining value and provider reimbursements to hospitals, and physicians in the coming years are likely to be impacted by these measures. Functional assessment of total hip and total knee patients are already reporting options in the Physician Quality Reporting System (PQRS) program, and the Centers for Medicare and Medicaid (CMS) is developing a plan for hospital level total joint cost and outcomes measures. In addition, there are plans to include these data at the Hospital Compare and Physician Compare websites.

2. **This is not a research effort, but one aimed at practice improvement.** Validated PROMs presented to the surgeon and the patient can be very helpful in the course of preoperative shared decision making and in tracking progress post-operatively. These provide another tool for surgeons to continue to improve the care that they provide to their patients.
3. **Patients and orthopaedic surgeons should work together to make patient-reported outcomes data as complete and accurate as possible.** If only a few patients respond, or respond at time points that are not comparable, then the results will not be representative, reliable, or relevant.

4. **The orthopedic community, through the AAOS, should look to develop agreement on a common set of metrics.** This is to be distinguished from developing or endorsing specific tools or survey instruments. Examples of the former might be Overall Quality of Life, Physical Function, or Pain Interference. Examples of the latter might be the Short Form 36 Health Survey (SF-36) or the Oxford Hip or Knee Scores. There is emerging research technology to allow the score on one instrument for a specific metric to be translated into a score on a different tool measuring the same metric. This eliminates the need for the AAOS to pick winners and losers amongst the various survey instruments, and to instead focus on the underlying metrics that best reflect the impact that orthopedic surgery provides to our patients.

5. **Both generic and condition-specific measures of health-related quality of life should be used.** It is important that providers capture both generic (e.g., SF-12 [12-Item Short-Form Health Survey], EQ-5D [EuroQol-5D]) and condition-specific (e.g., HOOS [Hip disability and Osteoarthritis Outcome Score], KOOS [Knee injury and Osteoarthritis Outcome Score], ODI [Oswestry Disability Index]) measures of health related quality of life, in order to understand the impact of an intervention on both the patient's overall health as well as the specific condition (e.g., arthritis) the intervention attempts to address.

6. **Members selecting survey tools for PROM acquisition should be sure that those instruments are easily administered, validated, and free to use** (e.g., no licensing fees for use). In this regard, the AAOS will be working with the specialty societies to identify appropriate generic and disease specific measures of health related quality of life. There are a number of providers of these services, ranging from the National Institute of Health (NIH)-sponsored PROMIS (Patient Reported Outcomes Measurement Information System) platform, to foundations (AO [Arbeitsgemeinschaft für Osteosynthesefragen]), to various commercial entities delivering PROM acquisition alone or as part of a larger practice analytics program.

7. **Every effort should be made to make the gathering of PROM data as easy and reliable as possible for patients and providers.** Every effort should be made to provide a means to gather, calculate, and present the results at the time of the office visit. Many technologies are available to facilitate these goals, including the use of digital acquisition over the web, the use of tablet computers in waiting or exam rooms, and the adoption of computerized adaptive testing (CAT) which can decrease the respondent burden by up to 70-80%.

**References:**


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