

# Patient Reported Outcome Measures Best Practices – Tool Administration



## Patient Reported Outcomes (PRO) Measures

Outcome measures using PROs are an excellent way to measure function, pain and quality of life from the best source of this information: the patient. Although using validated instruments for assessing patients is not new in clinical practice, using the results to calculate and aggregate outcomes at a practice level is a fairly new, highly sought measurement activity.

For more information please access the National Quality Forum's report at [www.qualityforum.org/Projects/n-r/Patient-Reported\\_Outcomes/Patient-Reported\\_Outcomes.aspx](http://www.qualityforum.org/Projects/n-r/Patient-Reported_Outcomes/Patient-Reported_Outcomes.aspx)

## Total Knee Replacement - Oxford Knee Score (OKS) Functional Status Tool Administration

### Background

In 2010, MN Community Measurement's Measurement and Reporting Committee (MARC) approved measure development activities for patients undergoing total knee replacement and requested the measure development work group focus on outcome measures related to functional status.

The work group reviewed available knee functional status tools and selected the Oxford Knee Score (OKS), a 12-question patient reported outcome (PRO) tool that quantifies pain and function related to the knee to measure the change between pre-operative and post-operative function. The work group additionally selected a tool for measuring changes in overall health related quality of life.

The OKS, though widely used in the United Kingdom and used by some work group members, was not widely used in clinical practices in Minnesota. Many orthopedic groups needed to implement new PRO tools into their clinical practice workflows.

PRO assessment tools are administered to the patient prior to the total knee replacement procedure and then again

within a defined post-operative period. The responses of each OKS tool are summed for a score; the difference between the pre-operative and post-operative scores is then calculated for each patient.

The outcome measures for average change in functional status and quality of life are planned for public reporting at the medical group level.

### Interim Plan

Pilot phases for the total knee replacement measures demonstrated less than desirable rates of tool administration - both pre-operatively and post-operatively - impeding the ability to reliably report outcome measures. To encourage and support increased PRO administration rates, the measure development work group recommended an interim step of public reporting of the rates of OKS tool administration with the hopes of increasing tool administration rates.

Additionally, the work group requested MNCM staff identify and survey medical groups with higher rates of OKS administration to facilitate the sharing of best practices. This document shares the findings of that research.

## Successful Tool Administration Methods

### Pre-Operative

*(Within three months prior to procedure)*

- Paper tools completed in waiting room prior to pre-op visit
- Completed tools when surgery is scheduled
- Included tools in chart prep processes
- If tools not obtained during pre-op visit, mailed to patient three weeks prior to surgery
- Tools included in required pre-op class

### Post-Operative

*(Nine to 15 months after procedure)*

- Pre-visit planning with paper tools completed in waiting room prior to post-op visit
- For patients without a follow-up visit, tools mailed with self-addressed, stamped return envelope
- Mailed out the post-operative tools that need to be completed each month, based on maintenance of a spreadsheet of all TKR procedures
- Developed TKR registry within the EMR to track and schedule 12-month post-operative visits



## Top Performers:

- Affiliated Community Medical Centers
- Allina Health Specialties
- Allina Health Clinics
- HealthPartners Clinics
- Heartland Orthopedic Specialists
- Northern Orthopedics, Ltd.
- The Orthopaedic & Fracture Clinic



## Survey of Top Performers

Key staff from the seven identified top performers were invited to participate in a survey to identify workflow practices and methods that can lead to higher PRO tool administration rates. Measures included rates of the following percentage of patients with completed OKS assessments:

- Pre-operative OKS
- One Year Post-operative OKS
- Pre- and One Year Post-operative OKS

All seven were surveyed and responses were garnered from five medical groups. These five practices represented both urban and rural practices, and respondents included quality improvement staff, data analysts and clinic administrators.

Groups were asked to share their successful and not-so-successful (if any) processes for obtaining completed OKS assessments from patients.

### Pre-operative

Most groups reported using a combination of methods to obtain pre-op OKS assessments, which increased completion rates.

Patients at Northern Orthopedics complete the pre-op tools at the time of surgery scheduling. If patients have been seen previously through outreach clinics or have not had a recent appointment, the tools are also mailed about three weeks prior to surgery.

Similarly, the Orthopaedic and Fracture Clinic has patients complete the tools during its surgery scheduling process; however, patients are also given the option to take the tools home and return them by mail. Allina Health System distributes the tools during required pre-procedure group education classes. Affiliated Community Medical Centers utilizes pre-visit planning and chart prep to make PRO tools readily available for administration.

It is generally preferred to have patients complete the tools during face-to-face visits, where they are a “captive audience.” The ideal opportunity for this is during pre-operative contact with patients.

### Post-operative

Post-operative follow up with patients can be more challenging. During the measure development process, provider members estimated only about 70 percent of patients returned for one year post-operative visits.

As with pre-operative assessment, all successful groups had more than one method of obtaining post-operative OKS assessments from their patients.

The top performers most frequently provide the OKS tool to patients during their one year post-operative visits. Some groups use a pre-visit planning process to flag patients and provide the tool for completion.

Other methods for insuring post-operative OKS completion include mailing the tool to patients who may not have a one year post-op visit and using registries to help keep track of patients.

Allina Health Services built a total knee registry within their EMR that tracks patients and schedules a one year post-operative visit.

Several groups mail tools to patients who do not have follow-up appointments with instructions to complete and return via self-addressed, stamped envelopes.

Northern Orthopedics experienced some difficulty with incomplete tools from patients who were given the OKS in the clinic, which may have been related to inconsistent verbal instructions from staff. This was in contrast to higher rates of completed tools from patients who had received it via mail with explicit instructions for completion.

This experience underscores the importance of having consistent patient instructions about completing all questions on the OKS.

These top performers illustrate that by utilizing multiple avenues of reaching patients and building the PRO tools into existing workflows, high rates of OKS tool completion are possible.