How to Collect and Submit PROMs to the AAOS Registry Program

05.07.2020
Agenda

• Registry Program Overview
• PROMs by Registry
  o AAOS Registry Portfolio
    - American Joint Replacement Registry (AJRR)
    - Shoulder & Elbow Registry (SER)
    - Musculoskeletal Tumor Registry (MSTR)
  o Collaborative Registry between AANS and AAOS
    - American Spine Registry
• Integrating PROMs Into Clinical Workflow
• Submitting to the Registry
• Accessing PROMs in RegistryInsights®
• Q&A
AAOS Family of Registries

AAOS Board of Directors

Registry Oversight Committee (ROC)

Collaborative Registries

Shoulder & Elbow Registry (SER)

American Joint Replacement Registry (AJRR)

Musculoskeletal Tumor Registry (MsTR)

Collaborative Registry with AANS & AAOS American Spine Registry (ASR)

Cervical Degenerative Spine & Lumbar Degenerative Spine
Accepts data from 2016 - present

Shoulder Arthroplasty
Rotator Cuff Repair
Elbow Arthroplasty
Accepts data from 2016 - present

Hip Arthroplasty
Knee Arthroplasty
Elbow Arthroplasty
Accepts data from 2012 - present

Orthopaedic Oncology
Accepts data from 2016 - present
Patient-reported Outcome Measures By Registry
Recommended PROMs

• Global Health Measure
  o Assessment allows measurement of patient’s symptoms, patient’s health perception, functioning, and health-related quality of life
  o Applicable to chronic diseases and conditions

• Anatomically Specific Measure
  o Measures are selected for the anatomical region of each registry and are collected across all modules within the registry

*Also Accepted Measures:* AJRR and ASR accept additional PROMs measures to allow sites to capture an expanded assessment of their patients. Sites may submit these additional measures, if desired, but are not required to do so.
# PROMs by Registry

<table>
<thead>
<tr>
<th>AJRR</th>
<th>SER</th>
<th>MsTR</th>
<th>ASR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROMIS-10</td>
<td>PROMIS-10</td>
<td>PROMIS-10</td>
<td>PROMIS-10</td>
</tr>
<tr>
<td>VR-12</td>
<td>VR-12</td>
<td>VR-12</td>
<td>VR-12</td>
</tr>
<tr>
<td>HOOS, Jr</td>
<td>ASES</td>
<td>MSTS</td>
<td>ODI/NDI</td>
</tr>
<tr>
<td>KOOS, Jr</td>
<td>SANE</td>
<td>TESS</td>
<td>PROMIS Physical Function</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Also Accepts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF-36</td>
</tr>
<tr>
<td>HOOS/KOOS</td>
</tr>
<tr>
<td>Oxford Hip and Knee Scores</td>
</tr>
<tr>
<td>Harris Hip Score</td>
</tr>
<tr>
<td>WOMAC</td>
</tr>
<tr>
<td>SF-12</td>
</tr>
<tr>
<td>EQ-5D</td>
</tr>
<tr>
<td>(final scores only)</td>
</tr>
<tr>
<td>Also Accepts:</td>
</tr>
<tr>
<td>PROMIS-29</td>
</tr>
<tr>
<td>PROMIS-CAT</td>
</tr>
<tr>
<td>PROMIS Depression</td>
</tr>
<tr>
<td>PROMIS Anxiety</td>
</tr>
<tr>
<td>PROMIS Pain Interference</td>
</tr>
<tr>
<td>EQ-5D</td>
</tr>
</tbody>
</table>
# PROMs Intervals

<table>
<thead>
<tr>
<th>Collection Interval</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline/Pre-operative</td>
<td>Within 90 days prior to the procedure</td>
</tr>
<tr>
<td>90 days/3 months</td>
<td>+/- 4 weeks</td>
</tr>
<tr>
<td>6 months</td>
<td>+/- 4 weeks</td>
</tr>
<tr>
<td>12 month</td>
<td>+/- 2 months</td>
</tr>
</tbody>
</table>

Updated intervals will apply across all registries for consistency. These intervals are expanded from the previous format for AJRR to provide a broad window for capturing this information.
Integrating PROMs Collection into Workflow

- Registry Users
- Collecting and Submitting PROMs
# Roles and Permission Rights

<table>
<thead>
<tr>
<th>Feature/Function</th>
<th>Registry Authorized User Role</th>
<th>PROMS Site Administrator Role</th>
<th>PROMS Clinician Role</th>
<th>Surgeon Authorized User Role</th>
<th>Data Submitter Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>File Upload &amp; Fixes</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>Dashboards (National &amp; Surgeon)</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>Reports</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>Tools &amp; Resources</td>
<td>✅</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td>✅</td>
</tr>
<tr>
<td>Search/Patient Detail</td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Registration Management</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiosk Mode</td>
<td></td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRO Profile</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manage Basic Users/Custom Email</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Registry Program Access

• **Authorized User**
  o Main user and point of contact for RegistryInsights™
  o Assists AAOS with assigning roles and updates
  o Able to view all levels of data and all dashboards (surgeon, institution, national)
  o Completes non-technical requests or inquiries to the Registry

• **PROMs Site Administrator**
  o Monitors and executes PROMs surveys for site
  o Ability to create multiple surgeon and clinician users for PROMs collection
  o Ability to manage multiple locations for PROMs collection and submission
  o Serves as point of contact for any PROMs related questions or issues
Data Submission Access

• **Data Submission User**
  - Has Access to submit data to the Registry via RegistryInsights™ and SFTP service
  - Works with the Registry Support and Optimization team to validate and correct data submitted to the Registry
  - Role is generally assigned to Data Manager, Data Extractor or Data Analyst positions
  - Questions? Please contact Registry Support at RegistrySupport@aaos.org
Surgeon Access

- **Surgeon Authorized Users**
  - Available *for* surgeons with procedures submitted to the Registry by the participating institution. Surgeons have access to the *Surgeon Dashboards* to view their data compared to benchmarks and various reporting features.
  - Surgeon accounts will include tabs to view the PROMS for their patients.
Submitting PROMs to the Registry
Pre-Operative PROMs Capture: Workflow Options

• Pre-operative: Office Visit
  o Administration of PROMs via computer, tablet device, or paper methods
  o Sites can push surveys to patients via the PRO portal, or conduct interviews with patients via phone and enter responses
  o Paper surveys require manual data entry which increases the burden on staff, so electronic resources are recommended, if available

• Pre-operative: Intake Day of Surgery
  o Could be completed during intake or by clinical staff
  o Options for staff to interview patient and enter responses
  o Surveys may be completed electronically on a computer or tablet device
Post-operative PROMs Capture: Workflow Options

- **Post Operative Office Visits**
  - PROMs completed at post operative visits at selected intervals (3, 6, 12 months, etc)
  - The Registry captures Pre-operative baseline, 90 day, and one year post operative values
  - Sites can select additional intervals

- **Clinical Workflow**
  - Front Office sets up collection – in office or emailing to patient
  - Ask patient to arrive early or capture at end of visit
  - Clinical staff could administer survey via computer or tablet device
Post-operative PROMs Capture: Workflow Options

• Phone interviews for PROMs collection
  • The Registry recommends entering responses from phone interviews into the PRO platform
  • This reduces the data entry burden on sites
    • For example: If the PROM is documented on paper, the site still needs to enter the information into the portal or a spreadsheet
  • If sites use paper surveys, the information can be transferred to the PRO platform or the PROMs header within the data specifications and the file can be uploaded to the Registry
Submitting PROMs

• If using the PROMs portal within RegistryInsights, surveys upload to the Registry upon completion

• Sites have the option to upload an Excel or csv file via secure pathway

• If sites use a third party technology solution, our team can work with you on how to submit your PROMs to the Registry
Accessing PROMs Within RegistryInsights®
Prom Management

Procedure Reports

Count of Components by Type

Count of Procedures by ICD-10 Procedure Codes

Count of Procedure

Procedures With C

Shoulder Procedures

Counts of Procedure

Patient Reported Outcomes Reports

Count of Components by Type

Assessment Summary

Patient Status Report

Patient Status Report

PART 2: Pre-Operative Case Information

Please complete all applicable required and optional fields of the pre-operative case section. Case information is required for all cases to be added to the registry. Please note that all case and required updates to the patient's profile will be sent to the designated recipient via email.

Planned Proc Date

Procedure Site

Shoulder Arthroplasty

Laterality

Left

PLANNED SURGERY DATE

1/24/21

1/24/21

1/28/21

1/28/21

1/20/2019

1/20/2019

1/20/2019

1/20/2019

1/20/2019

Submit

PART 1: Patient demographic details

Please complete all applicable required and optional fields of the patient demographic section. Note: Email is conditionally required, however, if you are administering assessments via email you must provide a patient email or the system will not be able to send the email to the patient.

If the Patient Social Security Number (SSN) is not available, please select the "Not Available" option next to the Social Security field. Please note that the Registry also accepts the last 4 digits of the SSN. Patient SSN assists the Registry with achieving its mission through the ability to track longitudinal device information.

Social Security

Not Available

Email
On-demand practice specific dashboards
- Compare your practice to national performance benchmarks
- Unlimited surgeon accounts with access to system, site, and surgeon level dashboards

RegistryInsights® Dashboards

- All Procedures - Nationally
  - Total Procedures: 1.77M
  - Gender Distribution: 53.6% Female, 46.4% Male
  - Mean Age: 67.0
  - Primary Procedures

- Modified 109 Measure
  - Hip Arthroplasty Patients with Pre-operative Functional Assessment for Your Institution(s)
  - Hip Arthroplasty Patients with Pre-operative Functional Assessment for Your System
Questions?

RegistryInfo@aaos.org