7 Benefits of AAOS Registry Program Participation

July 17th 2019
Agenda

• Introductions
  o Phil Dwyer, Registry Engagement Manager
  o Mariah Matesi, Senior Registry Engagement Associate
  o Frosiana Gjerazi, Registry Engagement Associate
  o Kristine Sizemore, Registry Engagement Associate

• Review of AAOS Registry Program
• Benefits
• What’s New?
• Q & A
AAOS Family of Registries

AAOS Board of Directors

Registry Oversight Committee

Future Registry
- Shoulder & Elbow Registry (SER)
  - Shoulder Arthroplasty
  - Rotator Cuff Repair
  - Elbow Arthroplasty
- American Joint Replacement Registry (AJRR)
  - Hip Arthroplasty
  - Knee Arthroplasty
- Musculoskeletal Tumor (MsT) Registry Pilot
- Orthopaedic Oncology

Future Registry
Quality Vision

Registries

• component of a larger quality vision

• provide data to inform AAOS guidelines and test performance measures

• provide feedback to providers to continuously improve their practice and healthcare outcomes

• allow AAOS to define what quality means in a value-based system

• reduce the reporting burdens on physicians

• help inform gaps in knowledge or areas for further education

“If you can’t measure it, you can’t improve it” ~ Drucker
• The American Joint Replacement Registry (AJRR) was re-integrated into AAOS
• The Registry Oversight Committee (ROC) was created
• Additional staff hired and physician leadership groups created
• Shoulder & Elbow Registry developed and launched
• Strategy for building a scalable and sustainable Registry Program developed
• Revamp of data specifications and problem-solving for improved data capture within AJRR including release of revised specification
1. A Growing Hub of Orthopaedic Registries
AJRR is the largest national Orthopaedic Registry in the world by annual volume of procedures

- Expanded Data Specs
- CMS Supplemental Data

We currently have 1300 subscribing sites, representing 1.7million procedures and over 10000 registered surgeons.

Participating Sites by State

Procedures by State
Registry Data Elements

**Procedural**
- **Patient**
  - Name (Last, First)
  - Date of Birth
  - Social Security Number
  - Diagnosis (ICD-9/10)
  - Gender
  - Race/Ethnicity
- **Hospital**
  - Name and Address
- **Surgeon**
  - Name (National Provider Identifier)

**Procedure**
- Type (ICD-9/10)
- Date of Surgery
- Laterality
- Implants

**Other**
- Comorbidities (ICD-9/10)
- Height & Weight/Body Mass Index
- Length of Stay
- American Society of Anesthesiologists Score
- Operative Complications

**Post-Op**

**Post-operative Complications**
- 90-day Re-admission

  - Re-admission Diagnosis (ICD-9/10)
  - Re-admission procedure type (ICD-9/10)
  - Re-admission date/discharge date

**PROMs**

**Patient, Hospital, Surgeon, and Procedure Data Elements needed for matching**

- Patient-reported Outcomes Recommended:
  - PROMIS-10 Global
  - VR-12
  - HOOS/KOOS, JR.
  - CJR Risk Variables
  - SANE
  - ASES

**PRO Tracking**
- Collection Interval
- Completion Date
Ease of Use

• Easy enrollment into additional registries: AJRR, SER, MST and future registries
• Use the same Platform-RegistryInsights™
• Access to the same resources as AJRR
  o Registry Support
  o Analytics
Authorized Vendor Program

Registry Authorized Vendors

We’ve partnered with technology vendors to help with a seamless data submission process for our institutions.
2. National Dashboards & Benchmarks
National Dashboards & Benchmarks

• Procedural Dashboards
• Post Op Complications
• PRO Dashboards
3. Surgeon Dashboards
Surgeons have accounts where they are able to:

- see their procedural, post-operative and PROM data
- compare themselves to national benchmarks
- request custom reports
- opt to submit data for quality initiatives (e.g. MOC, QPP)
4. PROMs Collection Portal
AAOS Registry Program
RegistryInsights™ Platform

- View PRO benchmarks
- Assign and manage patient assessments
  - Time intervals
  - Type of assessment
- Preregister patients
Collecting and Submitting PRO’s

**PRO Collection**
- *Through your EMR or paper, phone, email*
- *Third Party Vendor*
- *RegistryInsights PRO Administration platform*

**PRO Submission**
- *Via our file format upload-PROM layout*
- *Manually input data into an excel worksheet*
- *Vendor signs AAOS agreement and submits on Participant’s behalf, or*
- *Vendor collects PROs and sends to Participant to submit via a file upload*
- *Kiosk Mode*
- *Manual Entry*
- *Email*
### PROM Management

#### Procedure Reports

**Count of Components by Type**

- Shoulder Arthroplasty
- Rotator Cuff Repair

#### Patient Reported Outcomes Reports

**Assessment Summary**

<table>
<thead>
<tr>
<th>Account ID</th>
<th>Hospital/ASC Name</th>
<th>Patient ID</th>
<th>Last Name</th>
<th>First Name</th>
<th>Date of Birth</th>
<th>Address</th>
<th>Type</th>
<th>Phone Number</th>
<th>Procedure</th>
<th>Laterality</th>
<th>Planned Surgery Date</th>
<th>Surgeon Name</th>
<th>NPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1040462</td>
<td>SER Test Hospital 1</td>
<td>PRP30258</td>
<td>ajAOS</td>
<td>johnny</td>
<td>1/1/1990</td>
<td></td>
<td></td>
<td></td>
<td>Shoulder</td>
<td>Left</td>
<td>1/24/2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1040462</td>
<td>SER Test Hospital 1</td>
<td>PRP30258</td>
<td>ajAOS</td>
<td>johnny</td>
<td>1/1/1990</td>
<td></td>
<td></td>
<td></td>
<td>Shoulder</td>
<td>Left</td>
<td>1/24/2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1040461</td>
<td>SER Test Hospital 5</td>
<td>PRP30261</td>
<td>Bobby</td>
<td>Ricky</td>
<td>7/16/2019</td>
<td></td>
<td></td>
<td></td>
<td>Rotator Cuff Repair</td>
<td>Left</td>
<td>2/24/2019</td>
<td>1619012200</td>
<td></td>
</tr>
<tr>
<td>1040461</td>
<td>SER Test Hospital 5</td>
<td>PRP30261</td>
<td>Bobby</td>
<td>Ricky</td>
<td>7/16/2019</td>
<td></td>
<td></td>
<td></td>
<td>Rotator Cuff Repair</td>
<td>Right</td>
<td>2/28/2019</td>
<td>1619012200</td>
<td></td>
</tr>
<tr>
<td>1040462</td>
<td>SER Test Hospital 1</td>
<td>PRP30266</td>
<td>Brown</td>
<td>Charlie</td>
<td>1/1/1980</td>
<td></td>
<td></td>
<td></td>
<td>Shoulder Arthroplasty</td>
<td>Left</td>
<td>1/20/2019</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1040462</td>
<td>SER Test Hospital 1</td>
<td>PRP30266</td>
<td>Brown</td>
<td>Charlie</td>
<td>1/1/1980</td>
<td></td>
<td></td>
<td></td>
<td>Shoulder Arthroplasty</td>
<td>Left</td>
<td>1/20/2019</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1040462</td>
<td>SER Test Hospital 1</td>
<td>PRP30235</td>
<td>buskus</td>
<td>dick</td>
<td>1/1/1980</td>
<td></td>
<td></td>
<td></td>
<td>Shoulder Arthroplasty</td>
<td>Left</td>
<td>1/20/2019</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

---

**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.

**PART 2: Pre-Operative Case Information**

Please complete all applicable required and optional fields of the pre-operative case section. Note: Insurance information is required for claims to be entered in the Registry. Please note that all case data requested pertains to current procedure.

**Planned Post-Op Date**

- Procedure Site
  - Select One

**Diagnosis**

- Shoulder Arthroplasty

**Ethnicity**

- Select One

**Age**

- Select One

**Insurance**

- Select One

**Health */

- Select One

**Procedure Info**

- Select One

**Submit**
Patients see PROMs survey questions asked in an easy to answer format
5. Standard and Custom Reports
### Patient Reported Outcomes Reports

#### Procedures With Component Information (ICD-10)

<table>
<thead>
<tr>
<th>Procedure Description</th>
<th>Date</th>
<th>Procedure Code</th>
<th>ICD10 Replacement Code</th>
<th>Procedure Type</th>
<th>ICD10 Diagnosis Code</th>
<th>ICD10 Procedure Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right knee joint</td>
<td>5/31/2018</td>
<td>GKR7D0J</td>
<td>Replacement of Right Knee Joint with Synthesis</td>
<td>Replacement</td>
<td>$800.85</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Femoral Surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stem Resection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open Approach, Cemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left knee joint</td>
<td>5/31/2018</td>
<td>GKR7D0J</td>
<td>Replacement of Left Knee Joint with Synthesis</td>
<td>Replacement</td>
<td>$171.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Femoral Surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stem Resection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open Approach, Cemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left knee joint</td>
<td>6/28/2017</td>
<td>GKR7D0J</td>
<td>Replacement of Left Knee Joint with Synthesis</td>
<td>Replacement</td>
<td>$171.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Femoral Surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stem Resection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open Approach, Cemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left knee joint</td>
<td>7/31/2017</td>
<td>GKR7D0J</td>
<td>Replacement of Left Knee Joint with Synthesis</td>
<td>Replacement</td>
<td>$171.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Femoral Surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stem Resection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Open Approach, Cemented</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Custom Reports

Custom reports created by our analytics team to help understand and package your site data in an actionable format.

Custom reports can include site specific metrics and shape continuous improvements to the canned dashboards provided.

Aggregated Reports and national benchmarks for every metric across all data submitted including procedural, post-operative and PROMs data can be provided at your site level.

Email registryanalytics@aaos.org
6. Analytics Institute
A resource to the scientific community to further understand and improve orthopaedic and musculoskeletal care

The Institute gives clinicians and clinician-scientists the opportunity to submit proposals to answer hypothesis

For more information visit the RAI site

Any questions and applications sent to: Analyticsinstitute@aaos.org
7. Reuse and Accreditation
Increasing Re-Use of Data

- Calculate national performance benchmarks
- Qualify for national distinctions such as the Joint Commission advanced certification in hip or knee replacement
- Access to on-demand practice specific quality reports and dashboards to compare locally, regionally, and nationally
- Track and monitor outcomes with longitudinal patient information
- Reduce complications and revision rates across sites
- Receive surveillance alerts for poorly performing implants
- Support quality initiatives and participation in payer incentivized QI
- Improve data to support orthopaedic care and best practices
- Allow for re-use of data towards programs like MIPS, MOC, CME
Recently announced AAOS & TJC Partnership

AJRR serves to meet the requirements of the advanced certification for hip & knee

Effective July 1, 2019, the AJRR will become the sole pathway for meeting The Joint Commission’s THKR certification registry requirement.
New Features

• Surgeon Dashboards
• Post-Op Dashboards
• Analytics Institute
• Shoulder and Elbow Registry (SER)
• Additional Registries
• Additional and unlimited Data Uploader Roles
THANK YOU!

Contact us:
RegistryEngagement@aaos.org

www.aaos.org/registries | RegistryInfo@aaos.org