AAOS Registry Program
Benefits for ASCs and Private Practices

September 19th 2019
Agenda

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

• Review of AAOS Registry Program

• Benefits

• Q & A
The AAOS Registry Program

Overview
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
AAOS Registry Leadership

Registry Oversight Committee
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Steven D. Glassman, MD
Gerald Williams, Jr., MD
David S. Jevsevar, MD
Ronald A. Navarro, MD
Kurt P. Spindler, MD
Michael J. Gardner, MD

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Ronald A. Navarro, MD
John E. Kuhn, MD
Stephen F. Brockmeier, MD
Patrick St. Pierre, MD
Grant E. Garrigues, MD
Mark Baratz, MD

Musculoskeletal Tumor Registry Pilot
Benjamin Miller, MD, Lead

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Bryan Springer, MD, Vice Chair
David Lewallen, MD, Medical Director
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James L. Huddleston III, MD
Robert Krebbs
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David E. Mino, MD
Brian S. Parsley, MD
James D. Slover, MD
Scott Sporer, MD
Rick Seiden, Esq.
Paul Voorhorst, MS

Additional AJRR Committees
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James A. Browne, MD, Chair, Publications Subcommittee
Scott M. Sporer, MD, Chair, Data Elements Subcommittee
Richard L. Illgen, II, MD, Chair, Research Subcommittee
James I. Huddleston, III, MD, Chair, California State Registry Committee

Public Advisory Board
Rick Seiden, Esq., Chair
Over 1,300 contracted sites across all 50 states and the District of Columbia.

Sites have submitted data representing 9,145 surgeons and nearly 1.8 million procedures. Capturing 30% of all US TJA volume annually.
Registry Program Highlights

- AJRR was re-integrated into AAOS, the Shoulder & Elbow Registry (SER) & Musculoskeletal Tumor Registry (MsT) Pilot were developed and launched

- Investment in **technical infrastructure** to optimize user and multi-stakeholder experience
  - Development of **PROM dashboards**, data **access directly to AAOS surgeons**, and increased value of Registry Insights™

- Developed partnerships with **ABOS, Joint Commission, CMMI** for use of data in **MOC, COE, MIPS, and more**
Registry Program Highlights

- Launched **Registry Analytics Institute** to foster further dissemination of Registry Program data in literature, conferences, and across trainees
- Obtained **access to Medicare claims** data for linkage
- Selected for National Eval System for health Technology Coordinating Center (NESTcc) grant to participate in **feasibility pilot for data linkage from private payers**
- Developed partnership with **ASCA** and **Ortho Forum**
- Announced the **ASR** (American Spine Registry) as our next rollout
Registry Program Development Strategy

• Recruitment of new sites, expanding to more ambulatory surgical center (ASCs) and private practices

• Expansion of partnerships to bring re-use of data to participants

• Opportunities for collaboration around payer and certifying body incentive programs.

• Strategy for growing participation and building a self-sustaining program
The AAOS Registry Program

Benefits of Participation
Why Do Sites Participate?

- Compare your site to national performance benchmarks
- Access to on-demand practice specific quality reports and dashboards
- Facilitate tracking and monitoring of longitudinal patient outcomes
- Facilitate site, practice-specific, payer-incentivized performance improvement programs such as Blue Distinction and COE
- Qualify for national distinction programs such as the Joint Commission Advanced Certification and AAAHC
- Use for reporting to quality improvement programs such as MIPS & MOC
- Early access to surveillance alerts for poorly performing implants
- Improve the value of care delivered to patients
Recently announced AAOS & TJC Partnership

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

Effective July 1, 2019, the AJRR became the sole pathway for meeting The Joint Commission’s THKR certification registry requirement.
Presidio Surgery Center Earns Joint Commission Advanced Certification for Total Hip and Total Knee Replacement

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Data Snapshot
Did you know? Although both cemented and cementless stems remain popular for hemiarthroplasty in the United States, since 2013 a majority of surgeons in the AJRR sample (66% in 2017) continue to favor cementless designs. However, we have observed a significant trend toward greater cemented stem usage with each additional decade of...
"I think it surprised a lot of hospitals in the area that we were certified [Joint Commission Advanced THKR Certification] – and they weren’t.” Jessie Scott, Presidio Surgery Center Administrator.
The AAOS Registry Program

Getting Started
Getting Started

1. Contract with AAOS
2. Accounts are set-up
   - Site administrator
   - Data submission
   - Surgeon users
   - PROM administrators
3. Data Submission
   - Technical set-up
   - Test data submission
   - Live data submission
4. Use of data
   - Dashboards
   - Canned reports
   - Custom reporting
## Registry Data Elements

### Procedural

<table>
<thead>
<tr>
<th>Patient</th>
<th>Hospital</th>
<th>Surgeon</th>
</tr>
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<tbody>
<tr>
<td>• Name (Last, First)</td>
<td>• Name and Address</td>
<td>• Name (National Provider Identifier)</td>
</tr>
<tr>
<td>• Date of Birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Social Security Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diagnosis (ICD-9/10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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

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

**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
Submission Best Practices

• Most participants submit monthly, active submission is at least every 90 days
• Ask your site’s IT about setting up automated reports
• You can monitor data submission uploads and address errors by logging into RegistryInsights™
• To learn more about correcting cases with issues, follow the instructions in the How-To Guide: Fix Rejected Data in Uploaded Files to AJRR
Decreasing Data Burden

• AAOS has partnered with technology vendors to facilitate the data submission process

• Re-use data that already exists in medical record, practice management and PRO systems

• Direct data submission and management can be handled by a technology provider with sites able to fix rejected files
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
  - Registry Support
  - Analytics
The AAOS Registry Program

Accessing Your Data
Three ways to access data

- RegistryInsights™ Dashboards
- Registry Analytics Institute (RAI)
- Custom Reports
# Standard Reports

## Procedure Reports

- **Count of Components by Type**
- **Count of Procedures by ICD-9 Procedure Codes**
- **Count of Procedures by ICD-10 Procedure Codes**
- **Count of Procedures by CPT Procedure Codes**
- **Procedures With Component Information (ICD-9)**
  - Knee Procedures Submitted to AJRR (ICD-9)
  - Hip Procedures Submitted to AJRR (ICD-9)
- **Count of Procedures by surgeon**

## Patient Reported Outcomes Reports

### Assessment Summary
- **Patient Status Report**
- **All Patients Due For Survey Report**
- **Patient Compliance Report**

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

<table>
<thead>
<tr>
<th>Source</th>
<th>Latitude</th>
<th>Procedure Date</th>
<th>ICD9 Removal Code</th>
<th>ICD10 Removal Description</th>
<th>ICD10 Replacement Code</th>
<th>ICD10 Replacement Description</th>
<th>Procedure Type</th>
<th>ICD9 Diagnosis Code</th>
<th>ICD9 Diagnosis Description</th>
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<tbody>
<tr>
<td>Right</td>
<td>5/31/2016</td>
<td>05EB012</td>
<td>Replacement of Right hip joint, Femoral Surface with Synthes, Sublimis, Open Approach</td>
<td>Replacement</td>
<td>8090.85</td>
<td>$8090.85</td>
<td>Other osteoarthritis with current pathological fractures, right hip, subsequent anastomosis for fractures with manipulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left</td>
<td>5/31/2016</td>
<td>05D602</td>
<td>Replacement of Left Knee joint with Synthes, Sublimis, Open Approach, Cemented</td>
<td>Replacement</td>
<td>8171.12</td>
<td>$8171.12</td>
<td>Unilateral primary osteoarthritis, left knee</td>
<td></td>
<td></td>
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<tr>
<td>Left</td>
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<td>05A002</td>
<td>Replacement of Left Knee joint with Synthes, Sublimis, Open Approach, Cemented</td>
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<td>$8171.12</td>
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</table>

11/6/2019
National Dashboards & Benchmarks

- Procedural Dashboards
- Post Op Complications
- PRO 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)
Registry Analytic Institute (RAI)

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
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
The AAOS Registry Program

PROMs Portal
AAOS Registry Program
RegistryInsights™ Platform

- View PRO benchmarks
- Assign and manage patient assessments
  - Time intervals
  - Type of assessment
- Preregister patients
## Access to PRO Instruments

Patients see PROMs survey questions asked in an easy to answer format.

### General

<table>
<thead>
<tr>
<th>How was this captured?</th>
<th>When was this captured?</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>

### Stiffness

The following question concerns the amount of joint stiffness you have experienced during the last week in your knee. Stiffness is a sensation of restriction or slowness in the ease with which you move your knee joint.

1. How severe is your knee stiffness after first waking in the morning?

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

### Pain

What amount of knee pain have you experienced the last week during the following activities?

2. Twisting/pivoting on your knee

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

3. Straightening knee fully

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

4. Going up or down stairs

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

5. Standing upright

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

### Function, daily living

The following questions concern your physical function. By this we mean your ability to move and activities please indicate the degree of difficulty you have experienced in the last week due to you

6. Rising from sitting

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>

7. Bending to floor/pick up an object

<table>
<thead>
<tr>
<th>NONE</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
<th>EXTREME</th>
</tr>
</thead>
</table>
THANK YOU!

Contact us:
RegistryEngagement@aaos.org
www.aaos.org/registries | RegistryInfo@aaos.org