Getting Started with the Shoulder & Elbow Registry

www.aaos.org/registries/ser
Speaker Introductions

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- Registry Engagement Associate
Webinar Agenda

- AAOS Registry Program Introduction
- Overview of the SER
- RegistryInsights® Dashboards
- Accessing the SHARP Model
- Getting started with SER
- Q&A
At the Core of Academy Strategy

Registry Effort Goals

- Collect unique clinical information demonstrating real-world practice
- Enable performance measurement by physicians for physicians
- Facilitate national registry-driven quality improvement programs
- Support novel scientific research
AAOS Family of Registries

AAOS Board of Directors

Registry Oversight Committee

Collaborative Registries
- Collaborative Registry with AANS & AAOS American Spine Registry (ASR)
  - Cervical Degenerative Spine
  - Lumbar Degenerative Spine
- American Joint Replacement Registry (AJRR)
  - Hip Arthroplasty
  - Knee Arthroplasty
  - Hip Fracture*
- Musculoskeletal Tumor Registry (MstR)
  - Orthopaedic Sarcoma

AAOS Registries
- Shoulder & Elbow Registry (SER)
  - Shoulder Arthroplasty
  - Rotator Cuff Repair
  - Elbow Arthroplasty
  - Proximal Humerus*
- Fracture & Trauma Registry (FTR)
  - Hip Fracture*
  - Ankle Fracture*
  - Distal Radius Fracture*
  - Distal Femur Fracture*
  - Proximal Humerus*

*Modules in development
Over 1,600 participating sites contracted and 12,500 registered surgeons across all 50 states.

Data representing over 2,300,000 procedures capturing approximately 40% of all US TJA volume annually.
Qualified Clinical Data Registry

- AAOS maintains a QCDR designation
- Specialty society driven participation in the Merit-Incentive Based Payment System (MIPS)
- QCDR provides participants access to Promoting Interoperability (PI) and Quality Payment Program (QPP) credit
- Additional opportunities for alternative reporting for the bundled payment through BPCI-A episodes
Integration of Medicare Data

- Access to Medicare claims inclusive of inpatient (148 data elements), outpatient (122 data elements) & National Death Index
- Linked by full identifiers for longitudinal tracking
- 2012-2019 Medicare data for all patients represented in Registry with quarterly updates
  - Medicare files ~ 1 year delayed
  - National Death Index ~ 2 years delayed
  - National Inpatient Sample (NIS) integrated as reference data for representative analyses
  - NPPES dataset incorporated for NPI validation
- Access to custom reports that compare their site to the national Annual Report analyses, show migration trends, etc.
Data Reuse Opportunities

Participation in the American Academy of Orthopaedic Surgeons (AAOS) Registry Program offers a wide variety of data reuse opportunities including requirements for quality initiatives and state collaboratives.

- **AAOS RegistryInsights® Platform**
  - Standard Reports and personalized dashboards
- **AAOS RegistryInsights National Benchmarks**
- **Accreditation Association for Ambulatory Health Care (AAAHC) Advanced Orthopaedic Certification**
- **Aetna Institutes of Quality (IOQ) Orthopaedic Surgery**
- **American Board of Neurological Surgery (ABNS) Continuous Certification (CC)**
- **American Board of Orthopaedic Surgeons (ABOS) Maintenance of Certification (MOC) Program**
- **BlueCross BlueShield Blue Distinction Specialty Care**
- **Blue Shield of California waiver of prior authorization**
- **Bree Collaborative**
- **CMS Merit-based Incentive Payment System (MIPS) Promoting Interoperability (PI) and Quality Payment Program (QPP)**
- **Centers for Medicare & Medicaid Services (CMS) Bundled Payments for Care Improvement Advanced (BPCI-A)**
- **CMS Comprehensive Care for Joint Replacement (CJR) Model**
- **Cigna Surgical Treatment Support Program**
- **DNV GL Orthopaedic Center of Excellence**
- **The Alliance QualityPath**
- **The Joint Commission Advanced Certification for Total Hip & Knee Replacement**
- **The Joint Commission Advanced Certification in Spine Surgery (ACSS)**
About SER

- Working in collaboration with the specialty societies, the Academy created this Registry to collect shoulder and elbow procedural data across the United States.
- National data allows for establishing survivorship curves, tracking revisions, and improving the quality of patient care.
- Individual data can be accessed and used for performance improvement and quality initiatives on RegistryInsights® for site and surgeon users.
SER Steering Committee

- Gerald R. Williams Jr., MD, Chair
  The Rothman Institute
- Oke A. Anakwenze, MD, MBA
  Duke University
- Mark E. Baratz, MD
  American Society for Surgery of the Hand (ASSH) Representative
  Orthopaedic Specialists-UPMC
- Stephen F. Brockmeier, MD
  American Orthopaedic Society for Sports Medicine (AOSSM) Representative
  University of Virginia
- Grant E. Garrigues, MD
  American Shoulder and Elbow Surgeons (ASES) Representative
  Midwest Orthopaedics at Rush
- John E. Kuhn, MD
  Vanderbilt University Medical Center
- Ronald A. Navarro, MD
  Kaiser Permanente South Bay
- Carolyn M. Hettrich, MD, MPH
  Brigham and Women’s Hospital
- Joaquin Sanchez-Sotelo, MD
  Mayo Clinic
- Richard Seiden, Esq.
  Public Advisory Board (PAB) Representative
- Patrick St. Pierre, MD
  Arthroscopy Association of North America (AANA) Representative
  Desert Orthopedic Center
- Samuel A. Taylor, MD
  Eisenhower Health
- Stephen C. Weber, MD
  Hospital for Special Surgery
  The Johns Hopkins School of Medicine
SER Progress

- 130 contracted sites
- Over 14,500 procedures submitted across the US
- Representing over 13,000 unique patient cases
SER Data Element Overview

Procedure

Patient
• Name, Date of Birth, SSN
• Diagnosis (ICD-10, CPT)
• Gender
• Race/Ethnicity
• Height + Weight/Body Mass Index
• Payer Status

Site of Service
• Name and Address (TIN, NPI)

Surgeon
• Name (NPI)
• Trainee

Procedure
• Type (ICD-10, CPT)
• Date of Surgery, Length of Stay
• Surgical Approach
• Surgical Technique
• Laterality
• Implants (Manufacturer, Lot #)
• Anesthesia

Module-specific Procedural Elements
• Shoulder Arthroplasty Module: Includes codes for replacements, revisions, and fractures
• Elbow Arthroplasty Module: Ulnar Nerve Management
• Rotator Cuff Repair Module: Expanded ICD-10 and CPT options for shoulder, including muscle, tendon, and arthroscopy codes

Comorbidities & Complications
• Comorbidities (ICD-10, CPT)
• Height + Weight/Body Mass Index
• Length of Stay
• American Society of Anesthesiologists Score
• Charlson Index
• Operative and Post-operative Complications

Patient-reported Outcome
• PROMIS-10 Global
• VR-12
• SANE
• ASES

Three Modules Available
• Shoulder Arthroplasty
• Elbow Arthroplasty
• Rotator Cuff Repair

This page is a summary of the SER data elements and is not all inclusive.
Decrease Data Collection 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
Three Ways to Access Data

- RegistryInsights® Dashboards
- Custom Reports
- Registry Analytics Institute®
RegistryInsights® Dashboards

On-demand practice specific dashboards

Compare your practice to national performance benchmarks

Unlimited surgeon accounts with access to system, site, and surgeon level dashboards
PROM submission can occur via existing site systems/technology, via manual upload, or through the SER PROM solution.
Surgeon Dashboards

Authorized Surgeon Users

- View their procedural, post-operative and PROM data
- National benchmarks for comparison measures
- Print participation letter for ABOS MOC credits
- Access the Shoulder Arthroplasty Predictive (SHARP) Model
Shoulder Arthroplasty Predictive Model (SHARP)

Input Variables
- Surgery age in years
- Pre-op ASES score
- Disability status
- COPD status
- Alcohol use
- Anatomic or reverse arthroplasty
- Primary or revision arthroplasty

Output
- 2-year predicted ASES Score

- Created to help surgeons predict post-operative shoulder arthroplasty outcomes based on individual patient health
- Guide preoperative patient conversations and set expectations around surgical outcomes
- Available exclusively to SER registry participants
Accessing the SHARP Calculator

Shoulder Arthroplasty Predictive Model
Please complete the form to see two year predicted American Shoulder and Elbow Surgeons (ASES) Score

Age at Time of Surgery (Years) [ ]

Pre-Operative ASES Score [ ]

Patient Reported Disability [ ]
- Disability [ ]
- No Disability [ ]

Alcohol Use [ ]
- Current User [ ]
- Never Used [ ]
- No Alcohol Use [ ]

COPD Status [ ]
- COPD [ ]
- No COPD [ ]

Anatomic or Reverse Arthroplasty [ ]
- Anatomic [ ]
- Reverse [ ]

Primary or Revision Arthroplasty [ ]
- Primary [ ]
- Revision [ ]

Two Year Predicted ASES Score 91.7

See Two Year Predicted ASES Score
Accessing the SHARP Calculator

*This video was created in a demo environment and does not contain real patient information*
Accessing the SHARP Calculator

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Accessing the SHARP Calculator

Shoulder Arthroplasty Predictive Model

Please complete the form to see two year predicted American Shoulder and Elbow Surgeons (ASES) Score

Age at Time of Surgery (Years)

Pre-Operative ASES Score

Patient Reported Disability

- Disability
- No Disability

Two Year Predicted ASES Result

0

*This video was created in a demo environment and does not contain real patient information*
Why Do Sites Participate?

- Compare your practice 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 & Centers of Excellence

Qualify for national distinction programs such as the Joint Commission Advanced Certification & AAAHC

Use for reporting to quality improvement programs such as MIPS, BPCI-A, ABOS MOC & ABNS CC

Early access to surveillance alerts for poorly performing implants

Improve the value of care delivered to Patients

Facilitate site, practice-specific, payer-incentivized performance improvement programs such as Blue Distinction & Centers of Excellence
Steps to a Successful Start

**Contract & Welcome**
- Execute contract
- Schedule a Welcome call to identify your sites key contacts and roles with the Registry

**Data Collection & File Build**
- Walkthrough file development and file build
- File submission (SFTP/HTTPS) account creation

**Test File Submission**
- Two rounds of test file submissions

**Live File Submission**
- Final production set up and first live data submission

**RegistryInsights® Walkthrough**
- Once data has been submitted, sites will have a walkthrough with staff to review dashboards, reports, PROMs and other platform functionality
Questions?

RegistryInfo@aaos.org

www.aaos.org/registries/ser
Contact the AAOS Registry Program

General: RegistryInfo@aaos.org

Technical Support: RegistrySupport@aaos.org

Contracts, Invoicing, & Onboarding: RegistryEngagement@aaos.org

Custom Analytics: RegistryAnalytics@aaos.org

Registry Analytics Institute: RegistryAnalyticsInstitute@aaos.org

Phone: (847) 292-0530

Business Hours: Monday through Friday, 8 a.m. to 4 p.m. Central Time
Upcoming Webinars

- Opportunities with American Joint Replacement Registry
  - Speakers: Dr. Springer and Dr. Duwelius
  - Date/Time: Wednesday, 7/14, at 7:15 p.m. – 8:15 p.m. Central

- Shoulder & Elbow Registry: Introduction and 2019 Annual Report Highlights
  - Speakers: Dr. Kuhn and Dr. Navarro
  - Date/Time: Wednesday, 7/21, at 7:15 p.m. – 8:15 p.m. Central
Webinar Recordings

- Recordings and slide decks from past webinars can be found on this page of the AAOS website.

- If you would like to view a recording of a webinar held before October 2020, please visit learn.aaos.org.
Thank You!

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www.aaos.org/registries/ser