An Overview of the Shoulder & Elbow Registry

Gerald R. Williams Jr., MD
SER Steering Committee Chair

Grant E. Garrigues, MD
SER Steering Committee ASES Representative

www.aaos.org/registries/ser
Gerald R. Williams Jr, MD

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Grant E. Garrigues, MD

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Webinar Agenda

- AAOS Registry Program overview
- Introduction to the SER
- Partnerships and data reuse opportunities
- Accessing and making use of your data
- 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*
Participation Across the Registries

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.
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

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- 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
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- Joaquin Sanchez-Sotelo, MD
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Arthroscopy Association of North America (AANA) Representative
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Eisenhower Health

- Samuel A. Taylor, MD
Hospital for Special Surgery

- Stephen C. Weber, MD
The Johns Hopkins School of Medicine

-AAOS-
SER Progress

- 125 contracted sites
- Over 14,500 procedures submitted across the US
- Representing over 13,000 unique patient cases
Represents 7,834 patient procedures submitted
- 4,002 shoulder arthroplasty procedures - 60% were rTSA
- 3,784 rotator cuff repair procedures
- Download a copy of the SER Annual Report

Trends in the Use of Superior Capsular Reconstruction in the United States using the AAOS Shoulder and Elbow Registry
Stephen F. Brockmeier M.D., Grant E. Garrigues M.D., John E. Kuhn M.D., Ronald A. Navarro M.D., Joaquin, Sanchez-Sotelo M.D./Ph.D, Patrick St. Pierre M.D., Steven C. Weber M.D., Gerald R. Williams M.D.
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.*
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.
SER Partnerships

- AAOS has executed an MOU with the Ambulatory Surgical Center Association (ASCA) to complete an ASC pilot aimed at decreasing barriers and increasing ASC participation in SER
- AAOS has also executed a MOU with OrthoForum and OrthoConnect to facilitate private practice participation in SER
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.
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
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)
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
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
PROM submission can occur via existing site systems/technology, via manual upload, or through the SER PROM solution.
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.
The goal of the AAOS Registry Analytics Institute is to provide a resource to the scientific community to further understand and improve orthopaedic and musculoskeletal care by making data available to examine outcomes related to orthopaedics.

- The Institute provides clinicians and clinician-scientists the opportunity to submit proposals for analytic insight that are contained within its various registries.

- Selected awardees receive statistical support, data analyses, and potential monetary support.
# Why Do Sites Participate?

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<th>Facilitate site, practice-specific, <strong>payer-incentivized performance improvement</strong> programs such as Blue Distinction &amp; Centers of Excellence</th>
<th>Qualify for <strong>national distinction programs</strong> such as the Joint Commission Advanced Certification &amp; AAAHC</th>
<th>Use for reporting to <strong>quality improvement programs</strong> such as MIPS, BPCI-A, ABOS MOC &amp; ABNS CC</th>
<th>Early access to <strong>surveillance alerts</strong> for poorly performing implants</th>
<th>Improve the <strong>value of care</strong> delivered to Patients</th>
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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

- A Year into the American Spine Registry
  - Speakers: Dr. Glassman and Dr. Albert
  - Date/Time: Wednesday, 6/2, at 7:15 p.m. – 8:15 p.m. Central

- 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!

RegistryInfo@aaos.org

www.aaos.org/registries/ser