

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

Disclosures

Gerald R. Williams Jr, MD

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Disclosures

Grant E. Garrigues, MD

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- Patient IQ: Stock or stock Options
- ROM 3: Stock or stock Options
- SouthTech: Other financial or material support
- Techniques in Orthopaedics: Editorial or governing board
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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

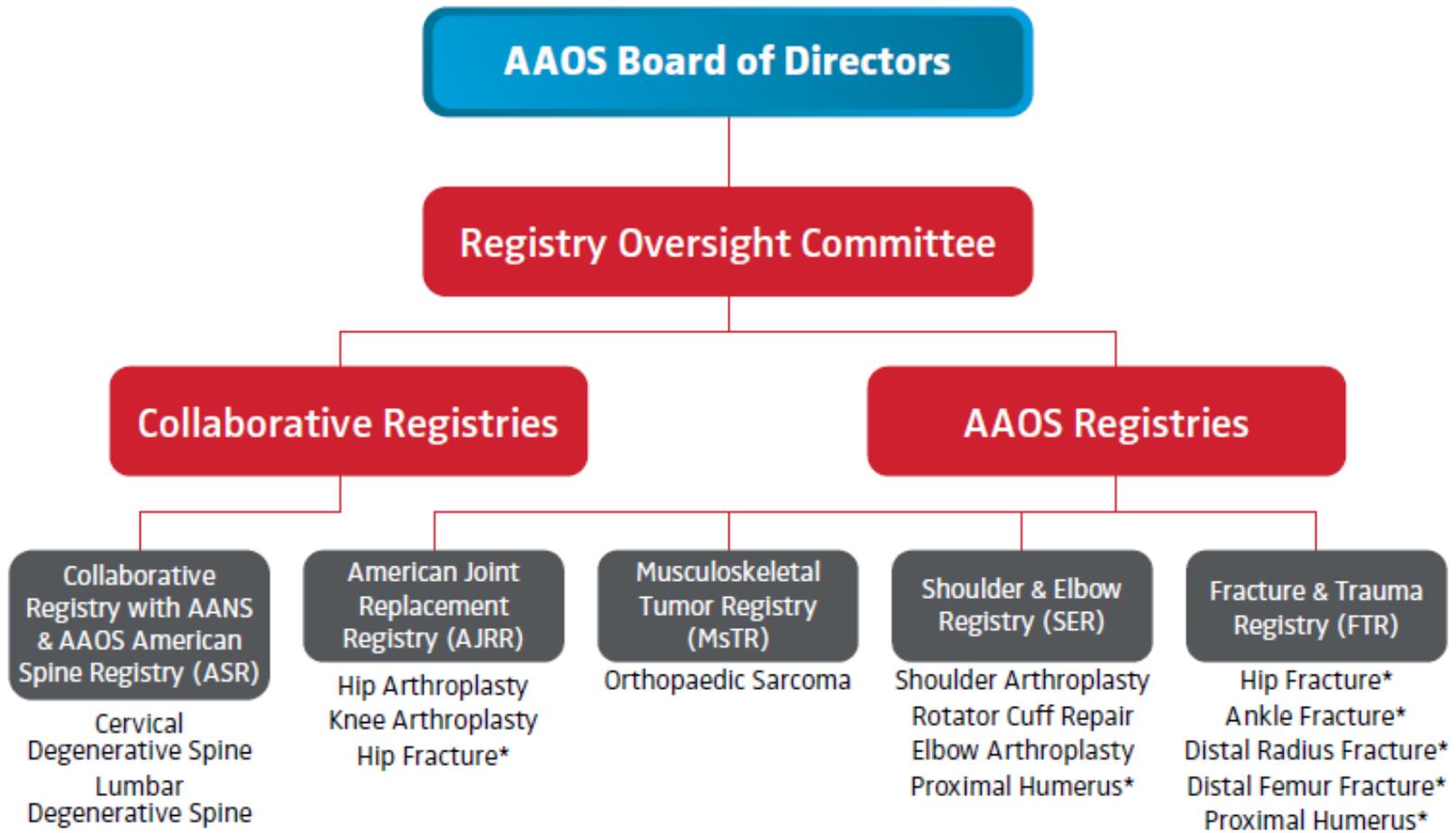
At the Core of Academy Strategy



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***

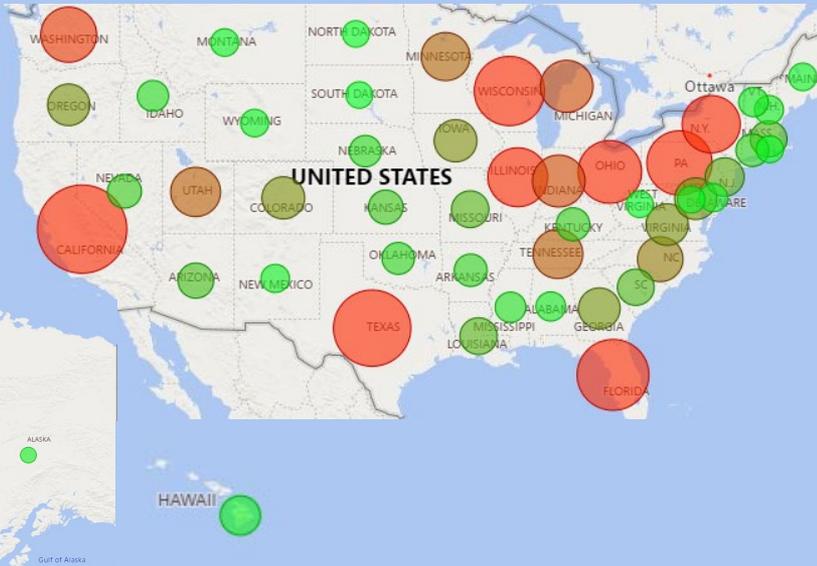
AAOS Family of Registries



*Modules In development

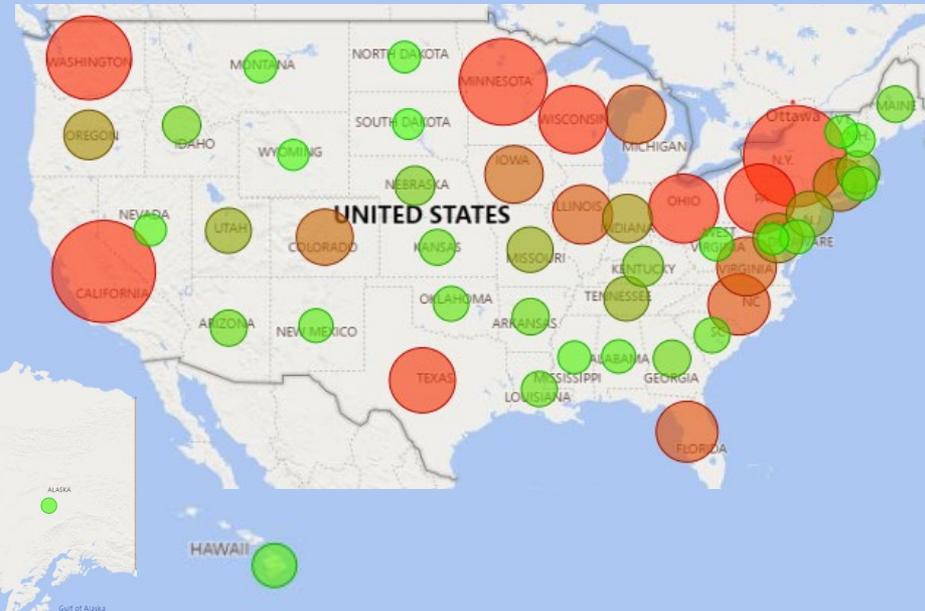
Participation Across the Registries

Sites by State



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

Procedures by State



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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- **Samuel A. Taylor, MD**
Hospital for Special Surgery
- **Stephen C. Weber, MD**
The Johns Hopkins School of Medicine

SER Annual Report & Publication



- 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

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
 - NPES dataset incorporated for NPI validation
- Access to custom reports that compare their site to the national Annual Report analyses, show migration trends, etc.

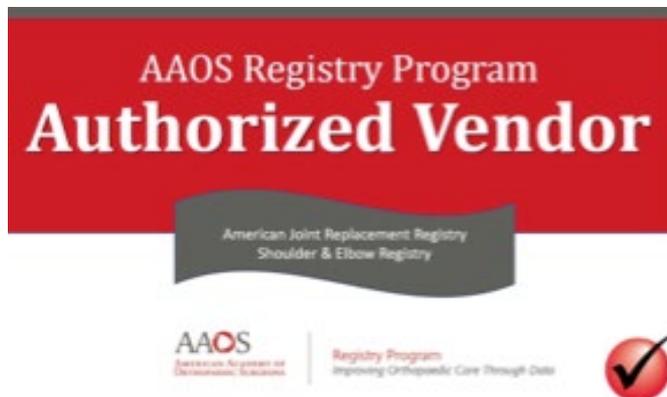
SER Partnerships

- 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

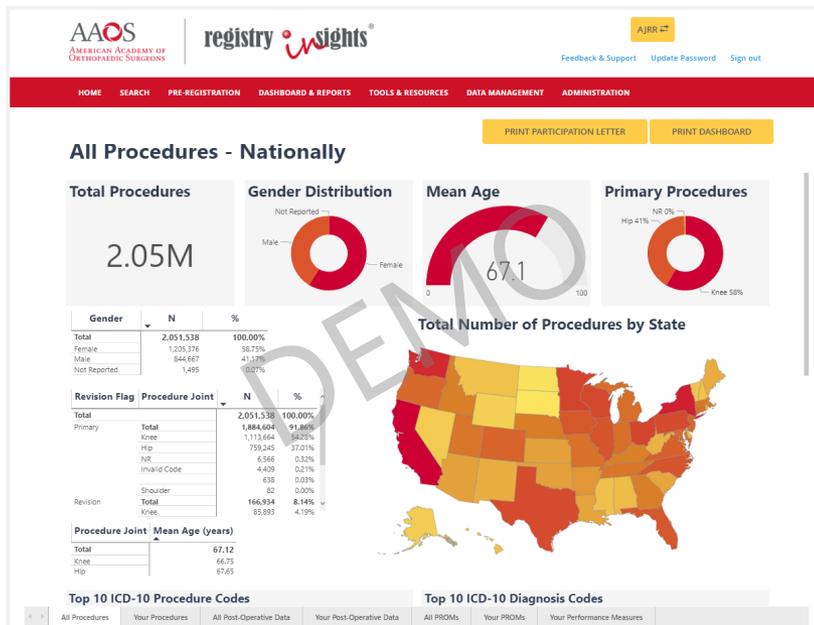


Custom
Reports



Registry Analytics
Institute®

RegistryInsights® Dashboards



On-demand practice specific dashboards



Compare your practice to national performance benchmarks



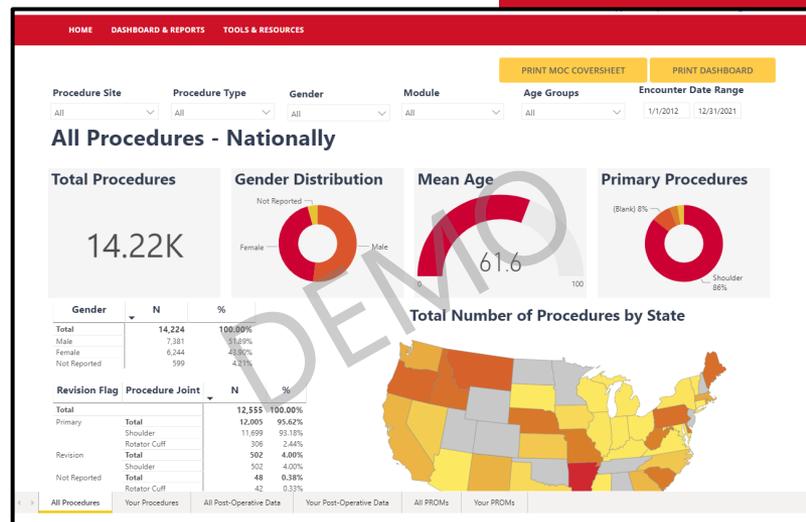
Unlimited surgeon accounts with access to system, site, and surgeon level dashboards



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



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

COPD Status

COPD No COPD

Two Year Predicted ASES Result

0

PROM Management

AAOS AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS | registry insights™

UNET Community Feedback & Support Sign out

HOME SEARCH PRE-REGISTRATION DASHBOARD & REPORTS TOOLS & RESOURCES DATA MANAGEMENT ADMINISTRATION

HOME / REPORTS

Procedure Reports Patient Reported Outcomes Reports

Count of Components by Type Assessment Summary

Count of Procedures by ICD-10 Procedure Codes Patient Status Report

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UNET Community Feedback & Support

HOME SEARCH PRE-REGISTRATION DASHBOARD & REPORTS TOOLS & RESOURCES DATA MANAGEMENT ADMINISTRATION

HOME / REPORTS / PROM PATIENT STATUS REPORT

Entries 10

ACCOUNT ID	HOSPITAL/ASC NAME	PATIENT ID	PATIENT LAST NAME	PATIENT FIRST NAME	PATIENT DATE OF BIRTH	PATIENT EMAIL ADDRESS	PATIENT PHONE TYPE	PATIENT PHONE NUMBER	PROCEDURE	LATERALITY	PLANNED SURGERY DATE	SURGEON NPI	SU
1041062	SER Test Hospital 1	PRP30258	atAAOS	johnny	1/1/1980								
1041062	SER Test Hospital 1	PRP30258	atAAOS	johnny	1/1/1980								
1041061	SER Test Hospital 5	PRP30261	Bobby	Ricky	7/16/2019								
1041061	SER Test Hospital 5	PRP30261	Bobby	Ricky	7/16/2019				Rotator Cuff Repair	Right	2/28/2019	1619012200	MI CI
1041062	SER Test Hospital 1	PRP30246	Brown	Charlie	1/1/1980				Shoulder Arthroplasty	Left	1/20/2019		
1041062	SER Test Hospital 1	PRP30246	Brown	Charlie	1/1/1980				Shoulder Arthroplasty	Left	1/20/2019		
1041062	SER Test Hospital 1	PRP30235	butkus	dick	1/1/1980				Shoulder Arthroplasty	Left	1/20/2019		

PRE-REGISTRATION FORM PRE-REGISTRATION UPLOAD

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 data requested pertains to future procedures.

Planned Proc Date

Procedure Site

Procedure

Indication

Surgeon

Paper Info

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

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

Registry Analytics Institute®

- 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?



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



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