AAOS Shoulder & Elbow Registry
Poster Review & Highlights from the 2020 Annual Report

Stephen F. Brockmeier, MD
SER Steering Committee AOSSM Representative

Juaquin Sanchez-Sotelo, MD, PhD
SER Steering Committee AAOS Representative

www.aaos.org/registries/ser
Speaker Introductions

- **Stephen F. Brockmeier, MD**
  Sports Medicine and Shoulder Surgery
  Professor of Orthopaedic Surgery
  University of Virginia
  Director, UVA Sports Medicine Fellowship Program
  Team Physician, UVA Athletics

- **Joaquin Sanchez-Sotelo, MD, PhD**
  Consultant and Professor of Orthopedic Surgery
  Chair, Division of Shoulder and Elbow Surgery
  Mayo Clinic
Webinar Agenda

- Shoulder & Elbow Registry overview
- Poster Presentations from SER
  - Trends in the Use of Superior Capsular Reconstruction in the United States using the AAOS Shoulder and Elbow Registry
  - Current Comparative Use of Anatomic and Reverse Shoulder Arthroplasty in the United States
- SER 2020 Annual Report Highlights
SER Steering Committee

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  Eisenhower Health
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  Hospital for Special Surgery
- Stephen C. Weber, MD
  The Johns Hopkins School of Medicine
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 Progress

- 136 contracted sites
- Over 17,000 procedures submitted across the US
- Representing over 15,000 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.
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
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)
## Why Do Sites Participate?

<table>
<thead>
<tr>
<th>Why</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compare your practice to <strong>national performance benchmarks</strong></td>
<td>Access to on-demand practice specific quality reports and dashboards</td>
</tr>
<tr>
<td>Facilitate tracking and monitoring of longitudinal patient outcomes</td>
<td>Qualify for <strong>national distinction programs</strong> such as the Joint Commission Advanced Certification &amp; AAAHC</td>
</tr>
<tr>
<td>Use for reporting to quality improvement programs such as MIPS, BPCI-A, ABOS MOC &amp; ABNS CC</td>
<td>Early access to surveillance alerts for poorly performing implants</td>
</tr>
<tr>
<td>Facilitate site, practice-specific, payer-incentivized performance improvement programs such as Blue Distinction &amp; Centers of Excellence</td>
<td>Improve the value of care delivered to Patients</td>
</tr>
</tbody>
</table>

**AAOS**

American Academy of Orthopaedic Surgeons

Shoulder & Elbow Registry

Improving Orthopaedic Care Through Data
Webinar Agenda

- Shoulder & Elbow Registry overview
- Poster Presentations from SER
  - Trends in the Use of Superior Capsular Reconstruction in the United States using the AAOS Shoulder and Elbow Registry
  - Current Comparative Use of Anatomic and Reverse Shoulder Arthroplasty in the United States
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Trends in the Use of Superior Capsular Reconstruction in the United States using the AAOS Shoulder and Elbow Registry

Brockmeier SF; Garrigues, GE; Kuhn JE; Navarro RA; Sanchez-Sotelo J; St. Pierre P; Weber SC; Williams GR
Background
Superior capsular reconstruction (SCR) has been described as a management option for irreparable rotator cuff tears and over the past seven years has been adopted by many surgeons into their clinical practice.

Purpose
The purpose of this study is to report the frequency and demographic patterns for use of SCR in the US using the AAOS Shoulder and Elbow Registry (AAOS-SER).
Methods

• All patients treated with a rotator cuff surgery as reported to the rotator cuff module of the AAOS-SER from January 2015 through March 2020 were analyzed.

• Bivariate analyses were performed to compare superior capsular reconstruction (SCR) versus non-SCR (RCR) procedures.

• Bivariate analyses were performed to compare demographic characteristics between the two cohorts.

• Procedural volumes were compared to determine the overall frequency of SCR within the entire cohort of rotator cuff procedures.
Results

• Of the total cohort of patients reported to the AAOS-SER who underwent rotator cuff surgery (3,701), 8.3% (306) were treated with an SCR procedure.

• While the yearly case volume of SCR procedures increased slightly from 2015 to the present, the annual percentage of the overall cohort did not significantly change over that time period.
## Results

<table>
<thead>
<tr>
<th></th>
<th>Total Cohort (N=3,701)</th>
<th>SCR (N=306)</th>
<th>Non-SCR/RCR (N=3,395)</th>
<th>p-value</th>
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<tr>
<td><strong>Age, mean ± SD</strong></td>
<td>54.5 ± 16.1</td>
<td>29.1 ± 13.3</td>
<td>54.6 ± 14.6</td>
<td>&lt;0.0001</td>
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<td><strong>Age</strong></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td></td>
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<td>&lt;20</td>
<td>187 (5.1%)</td>
<td>90 (29.4%)</td>
<td>97 (2.9%)</td>
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<td>20-29</td>
<td>298 (8.1%)</td>
<td>107 (35%)</td>
<td>191 (5.6%)</td>
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<td>30-39</td>
<td>237 (6.4%)</td>
<td>46 (15%)</td>
<td>191 (5.6%)</td>
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<td>40-49</td>
<td>569 (15.4%)</td>
<td>33 (10.8%)</td>
<td>536 (15.8%)</td>
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<td>50-59</td>
<td>991 (26.8%)</td>
<td>23 (7.5%)</td>
<td>968 (28.5%)</td>
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<td>&gt;=60</td>
<td>1419 (38.3%)</td>
<td>7 (2.3%)</td>
<td>1412 (41.6%)</td>
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<tr>
<td><strong>Sex</strong></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>&lt;0.0001</td>
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<td>70 (22.9%)</td>
<td>1288 (37.9%)</td>
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<td>236 (77.1%)</td>
<td>2107 (62.1%)</td>
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<td><strong>BMI</strong></td>
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<td>N (%)</td>
<td>N (%)</td>
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<td>4 (0.7%)</td>
<td>24 (1.3%)</td>
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<td>681 (18.4%)</td>
<td>118 (16.6%)</td>
<td>563 (38.6%)</td>
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<td>Pre-Obesity</td>
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<td>101 (30.7%)</td>
<td>1041 (33%)</td>
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<td>Obesity Class I</td>
<td>779 (21.1%)</td>
<td>35 (21.9%)</td>
<td>744 (11.4%)</td>
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<td>Obesity Class II</td>
<td>397 (10.7%)</td>
<td>26 (10.9%)</td>
<td>371 (8.5%)</td>
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<td>Obesity Class III</td>
<td>287 (7.8%)</td>
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<td>280 (2.3%)</td>
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<td>387 (10.5%)</td>
<td>372 (11%)</td>
<td>15 (4.9%)</td>
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<td><strong>Practice setting</strong></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
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<td>Major</td>
<td>17 (0.5%)</td>
<td>0 (0%)</td>
<td>17 (0.5%)</td>
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<td>Minor</td>
<td>2030 (54.9%)</td>
<td>168 (54.9%)</td>
<td>1862 (54.9%)</td>
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<tr>
<td>University</td>
<td>1473 (39.8%)</td>
<td>130 (42.5%)</td>
<td>1343 (39.6%)</td>
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<tr>
<td>Non-teaching</td>
<td>3 (0.1%)</td>
<td>0 (0%)</td>
<td>3 (0.1%)</td>
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<tr>
<td>Unknown/Missing</td>
<td>178 (4.8%)</td>
<td>8 (2.6%)</td>
<td>170 (5%)</td>
<td></td>
</tr>
<tr>
<td><strong>Hospital Size</strong></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>0.1138</td>
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<tr>
<td>Small (&lt;100 beds)</td>
<td>3 (0.1%)</td>
<td>0 (0%)</td>
<td>3 (0.1%)</td>
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</tr>
<tr>
<td>Medium (100-399 beds)</td>
<td>355 (9.6%)</td>
<td>23 (7.5%)</td>
<td>332 (9.8%)</td>
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<tr>
<td>Large (400+)</td>
<td>3165 (85.5%)</td>
<td>275 (89.9%)</td>
<td>2890 (85.1%)</td>
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<tr>
<td>Unknown/Missing</td>
<td>172 (4.8%)</td>
<td>8 (2.6%)</td>
<td>164 (5%)</td>
<td></td>
</tr>
</tbody>
</table>
Results

- The average age of the SCR cohort was 29.1 years compared to 54.6 years in the RCR group, which was statistically significant.

- Approximately 90% of SCR patients were under the age of 50 at the time of their procedure compared to only 30% undergoing RCR. Nearly 65% of the SCR cohort was under the age of 30.

- When compared to the RCR group, SCR was performed significantly more commonly in males and in patients with obesity.

- There were no statistical differences noted in the frequency of SCR when comparing practice setting or hospital size.
Discussion

• SCR has gained popularity in the US since 2015, accounting for approximately 8% of all AAOS-SER rotator cuff procedures.

• Future registry data will be essential to follow comparative patient reported outcomes for this procedure and to monitor complications and revision rates of SCR, specifically in this very young patient cohort.
Webinar Agenda

- Shoulder & Elbow Registry overview
- Poster Presentations from SER
  - Trends in the Use of Superior Capsular Reconstruction in the United States using the AAOS Shoulder and Elbow Registry
  - Current Comparative Use of Anatomic and Reverse Shoulder Arthroplasty in the United States
- SER 2020 Annual Report Highlights
Current Comparative Use of Anatomic and Reverse Shoulder Arthroplasty in the United States

The AAOS Shoulder and Elbow Registry (AAOS SER)

Background

Most published studies on the utilization of anatomic total shoulder arthroplasty (TSA) and reverse shoulder arthroplasty (RSA) have gathered data from large academic institutions. Data collected and analyzed by nationwide registries provide a more accurate snapshot of the current comparative use of TSA and RSA.

Purpose

The purpose of this study was to analyze TSA and RSA procedures reported to the AAOS Shoulder and Elbow Registry (SER) over the last five years.
Methods

• January 2015 to March 2020
• 4,155 shoulder arthroplasties reported to AAOS SER
  o Anatomic total shoulder arthroplasty (TSA) – 1,538
  o Reverse shoulder arthroplasty (RSA) – 2,617
• Stratified by three main diagnosis
  o Cuff-tear arthropathy (CTA) / functionally irreparable rotator cuff tear (FIRCT)
  o Primary osteoarthritis (OA)
  o Proximal humerus fracture (PHFx)
• Further stratification by age, gender, BMI, Charlson Comorbidity Index (CCI), US region and hospital bed count
• Bivariate analyses
Results

• RSA represents 63% of shoulder arthroplasties reported to AAOS SER
  o CTA / FIRCT 98% RSA vs 2% hemiarthroplasty
  o OA 54% RSA vs 46% TSA
  o PHFx 93% RSA vs 7% hemiarthroplasty

• Male:female ratios were 57/43 for TSA vs 40/60 for RSA

• 35% patients under 60-year-old received RSA

• No major differences amongst
  o United States regions
  o Different size institutions

• 25% of patients receiving shoulder arthroplasty were class II or III obese

• 25% of patients receiving shoulder arthroplasty had CCI >2
## Results

<table>
<thead>
<tr>
<th></th>
<th>Reverse Shoulder Arthroplasty (N=2,617)</th>
<th>Total Shoulder Arthroplasty (N=1,538)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1,569 (59.95%)</td>
<td>656 (42.65%)</td>
</tr>
<tr>
<td>Male</td>
<td>1,048 (40.05%)</td>
<td>882 (57.35%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;50</td>
<td>29 (1.11%)</td>
<td>82 (5.33%)</td>
</tr>
<tr>
<td>50-59</td>
<td>170 (6.50%)</td>
<td>287 (18.66%)</td>
</tr>
<tr>
<td>60-69</td>
<td>754 (28.81%)</td>
<td>567 (36.87%)</td>
</tr>
<tr>
<td>70-79</td>
<td>1,213 (46.35%)</td>
<td>485 (31.53%)</td>
</tr>
<tr>
<td>80-89</td>
<td>429 (16.39%)</td>
<td>115 (7.48%)</td>
</tr>
<tr>
<td>&gt;90</td>
<td>22 (0.84%)</td>
<td>2 (0.13%)</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
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<tr>
<td>Midwest</td>
<td>483 (18.46%)</td>
<td>221 (14.37%)</td>
</tr>
<tr>
<td>Northeast</td>
<td>1,463 (55.90%)</td>
<td>857 (55.72%)</td>
</tr>
<tr>
<td>South</td>
<td>519 (19.83%)</td>
<td>360 (23.41%)</td>
</tr>
<tr>
<td>West</td>
<td>152 (5.81%)</td>
<td>100 (6.50%)</td>
</tr>
<tr>
<td><strong>BMI</strong></td>
<td></td>
<td></td>
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<tr>
<td>Underweight</td>
<td>134 (5.12%)</td>
<td>87 (5.66%)</td>
</tr>
<tr>
<td>Normal</td>
<td>406 (15.51%)</td>
<td>191 (12.42%)</td>
</tr>
<tr>
<td>Pre-Obesity</td>
<td>792 (30.26%)</td>
<td>463 (30.10%)</td>
</tr>
<tr>
<td>Obesity Class I</td>
<td>643 (24.57%)</td>
<td>382 (24.84%)</td>
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<tr>
<td>Obesity Class II</td>
<td>310 (11.85%)</td>
<td>197 (12.81%)</td>
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<td>Obesity Class III</td>
<td>332 (12.69%)</td>
<td>218 (14.17%)</td>
</tr>
<tr>
<td><strong>Charlson Comorbidity Index (CCI)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Comorbidities</td>
<td>1,959 (74.86%)</td>
<td>1,329 (86.41%)</td>
</tr>
<tr>
<td>1</td>
<td>402 (15.36%)</td>
<td>140 (9.10%)</td>
</tr>
<tr>
<td>2</td>
<td>166 (6.34%)</td>
<td>45 (2.93%)</td>
</tr>
<tr>
<td>3+</td>
<td>90 (3.44%)</td>
<td>24 (1.56%)</td>
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<tr>
<td><strong>Institution Size (Bed count)</strong></td>
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<td></td>
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<tr>
<td>Small (1-99)</td>
<td>194 (7.51%)</td>
<td>112 (7.50%)</td>
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<tr>
<td>Medium (100-399)</td>
<td>256 (9.91%)</td>
<td>203 (13.60%)</td>
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<td>Large (400+)</td>
<td>1,896 (73.43%)</td>
<td>1,091 (73.07%)</td>
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<tr>
<td>Unknown</td>
<td>236 (9.14%)</td>
<td>87 (5.83%)</td>
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<tr>
<td><strong>Diagnosis</strong></td>
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<td></td>
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<tr>
<td>Osteoarthritis</td>
<td>1,595 (60.95%)</td>
<td>1,384 (89.99%)</td>
</tr>
<tr>
<td>Cuff tear arthopathy/irreparable cuff</td>
<td>527 (20.14%)</td>
<td>13 (0.85%)</td>
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<tr>
<td>Fracture</td>
<td>252 (9.63%)</td>
<td>19 (1.24%)</td>
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<tr>
<td>Other diagnoses</td>
<td>243 (9.29%)</td>
<td>122 (7.94%)</td>
</tr>
</tbody>
</table>
Discussion

- RSA represented 63% of the shoulder arthroplasties reported to the AAOS SER in the United States over the last 5 years.
- RSA has replaced hemiarthroplasty for most of the procedures performed for fracture or cuff-deficient shoulders.
- RSA represented 35% of the shoulder arthroplasties performed under the age of 60.
- Relative utilization of TSA and RSA seems to be similar across regions and institutions.
- A relatively large proportion of shoulders reported to the AAOS SER were performed in patients with obesity and substantial comorbidities.
Webinar Agenda

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- SER 2020 Annual Report Highlights
Overall Results

- 12,139 submitted procedures dating 1/1/2015 – 12/31/2020
- 177 submitting surgeons
- 112 participating facilities
- 71% of the patients reported are white, including Hispanic

Figure 1.1 Cumulative Procedural Volume by Year, 2015-2020 (N=12,139)
Shoulder Arthroplasty

- 6,321 shoulder arthroplasty procedures submitted dating 2015-2020
  - Most were rTSA (57.43%)
  - Average age of patients was 69.82 years
Shoulder Arthroplasty

Figure 2.2 Shoulder Arthroplasty Procedures by Age Group, 2015-2020 (N=6,179)
SER 2020 Annual Report Highlights

Shoulder Arthroplasty

Figure 2.6b Primary Diagnosis of Reverse Total Shoulder Arthroplasty Procedures, 2015-2020 (N=3,490)

- Other and unspecified osteoarthritis (n=1,976) - 56.62%
- Rotator Cuff Tear (n=669) - 19.17%
- Fracture (n=414) - 11.86%
- Arthropathy (n=208) - 5.96%
- Other joint disorder, not elsewhere classified (n=160) - 4.58%
- Dislocation of joints and ligaments of shoulder (n=22) - 0.63%
- Rheumatoid arthritis related to shoulder (n=20) - 0.57%
- Osteonecrosis (n=10) - 0.29%
- Sprain of Shoulder Joint (n=3) - 0.09%
- Other Instability (n=3) - 0.09%
- Impingement Syndrome (n=2) - 0.06%
- Adhesive Capsulitis (Frozen Shoulder) (n=2) - 0.06%
- Other disorders of muscles (n=1) - 0.03%
SER 2020 Annual Report Highlights

Rotator Cuff Repair

• 5,430 rotator cuff repair procedures submitted

Figure 3.1 Sex Distribution of Rotator Cuff Procedures by Age, 2015-2020 (N=5,430)
# SER 2020 Annual Report Highlights

## Rotator Cuff Repair

<table>
<thead>
<tr>
<th>Rotator Cuff Procedural Grouping</th>
<th>CPT Code</th>
<th>Frequency</th>
<th>% of Total</th>
<th>Mean Age</th>
<th>SD Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthroscopic Rotator Cuff Repair (N=3,087)</td>
<td>29827</td>
<td>3087</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>w/ Subacromial Decompression</td>
<td>29826</td>
<td>2441</td>
<td>79.1%</td>
<td>5960</td>
<td>1009</td>
</tr>
<tr>
<td>w/ Biceps Tenodesis</td>
<td>29828 or 23430</td>
<td>1278</td>
<td>41.4%</td>
<td>5908</td>
<td>975</td>
</tr>
<tr>
<td>w/ Distal Clavicle Excision</td>
<td>29824 or 23120</td>
<td>668</td>
<td>21.6%</td>
<td>5969</td>
<td>990</td>
</tr>
<tr>
<td>w/ Debridement</td>
<td>29822 or 29823</td>
<td>650</td>
<td>21.1%</td>
<td>6109</td>
<td>966</td>
</tr>
<tr>
<td>w/ SLAP Repair (Superior Labrum Anterior and Posterior)</td>
<td>29807</td>
<td>63</td>
<td>2.0%</td>
<td>5216</td>
<td>1026</td>
</tr>
<tr>
<td>w/ Lysis of Adhesions</td>
<td>29825</td>
<td>45</td>
<td>1.5%</td>
<td>6260</td>
<td>838</td>
</tr>
<tr>
<td>w/ Capsulorrhaphy</td>
<td>29806</td>
<td>26</td>
<td>0.8%</td>
<td>5012</td>
<td>1904</td>
</tr>
<tr>
<td>w/ Bankart Procedure</td>
<td>23455</td>
<td>3</td>
<td>0.1%</td>
<td>5233</td>
<td>666</td>
</tr>
<tr>
<td>Open Rotator Cuff Repair (CPT 23410 or 23412) (N=93)</td>
<td>23410 or 23412</td>
<td>93</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>w/ Arthroscopic Debridement</td>
<td>29823 or 29822</td>
<td>39</td>
<td>41.94%</td>
<td>5564</td>
<td>1312</td>
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<tr>
<td>w/ Distal Clavicle Excision</td>
<td>23120</td>
<td>32</td>
<td>34.41%</td>
<td>5878</td>
<td>1048</td>
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<tr>
<td>w/ Biceps Tenodesis</td>
<td>23430</td>
<td>25</td>
<td>26.88%</td>
<td>5760</td>
<td>1099</td>
</tr>
<tr>
<td>w/ SLAP Repair</td>
<td>29807</td>
<td>8</td>
<td>8.60%</td>
<td>5275</td>
<td>1071</td>
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<td>w/ Bankart Procedure</td>
<td>23455</td>
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<td>3.23%</td>
<td>4667</td>
<td>1877</td>
</tr>
<tr>
<td>w/ Capsulorrhaphy</td>
<td>29806</td>
<td>2</td>
<td>2.15%</td>
<td>3700</td>
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<tr>
<td>w/ Acromioplasty</td>
<td>23130</td>
<td>1</td>
<td>1.08%</td>
<td>6100</td>
<td>-</td>
</tr>
<tr>
<td>Open Rotator Cuff Repair w/ Acromioplasty (Reconstruction of Complete Rotator Cuff Avulsion) (N=169)</td>
<td>23420</td>
<td>169</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>w/ Distal Clavicle Excision</td>
<td>23120</td>
<td>129</td>
<td>76.33%</td>
<td>6109</td>
<td>991</td>
</tr>
<tr>
<td>w/ Arthroscopic Debridement</td>
<td>29824 or 29822</td>
<td>122</td>
<td>72.19%</td>
<td>6125</td>
<td>965</td>
</tr>
<tr>
<td>w/ Biceps Tenodesis</td>
<td>23430</td>
<td>22</td>
<td>13.02%</td>
<td>5845</td>
<td>828</td>
</tr>
<tr>
<td>w/ SLAP Repair</td>
<td>29807</td>
<td>17</td>
<td>10.06%</td>
<td>5976</td>
<td>889</td>
</tr>
<tr>
<td>w/ Capsulorrhaphy</td>
<td>29806</td>
<td>2</td>
<td>1.18%</td>
<td>6700</td>
<td>1273</td>
</tr>
</tbody>
</table>
Questions?

RegistryInfo@aaos.org

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