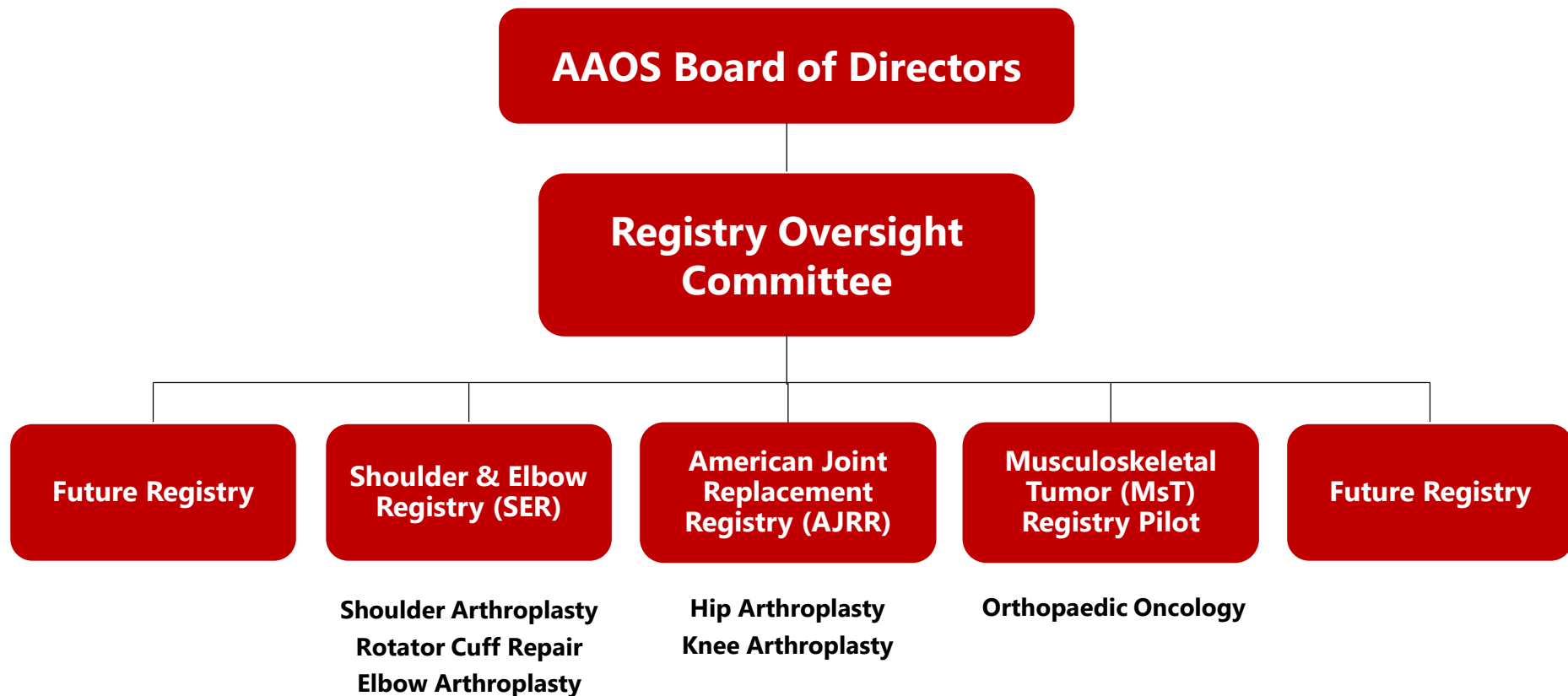


# Shoulder & Elbow Registry (SER) Update

# AAOS Family of Registries



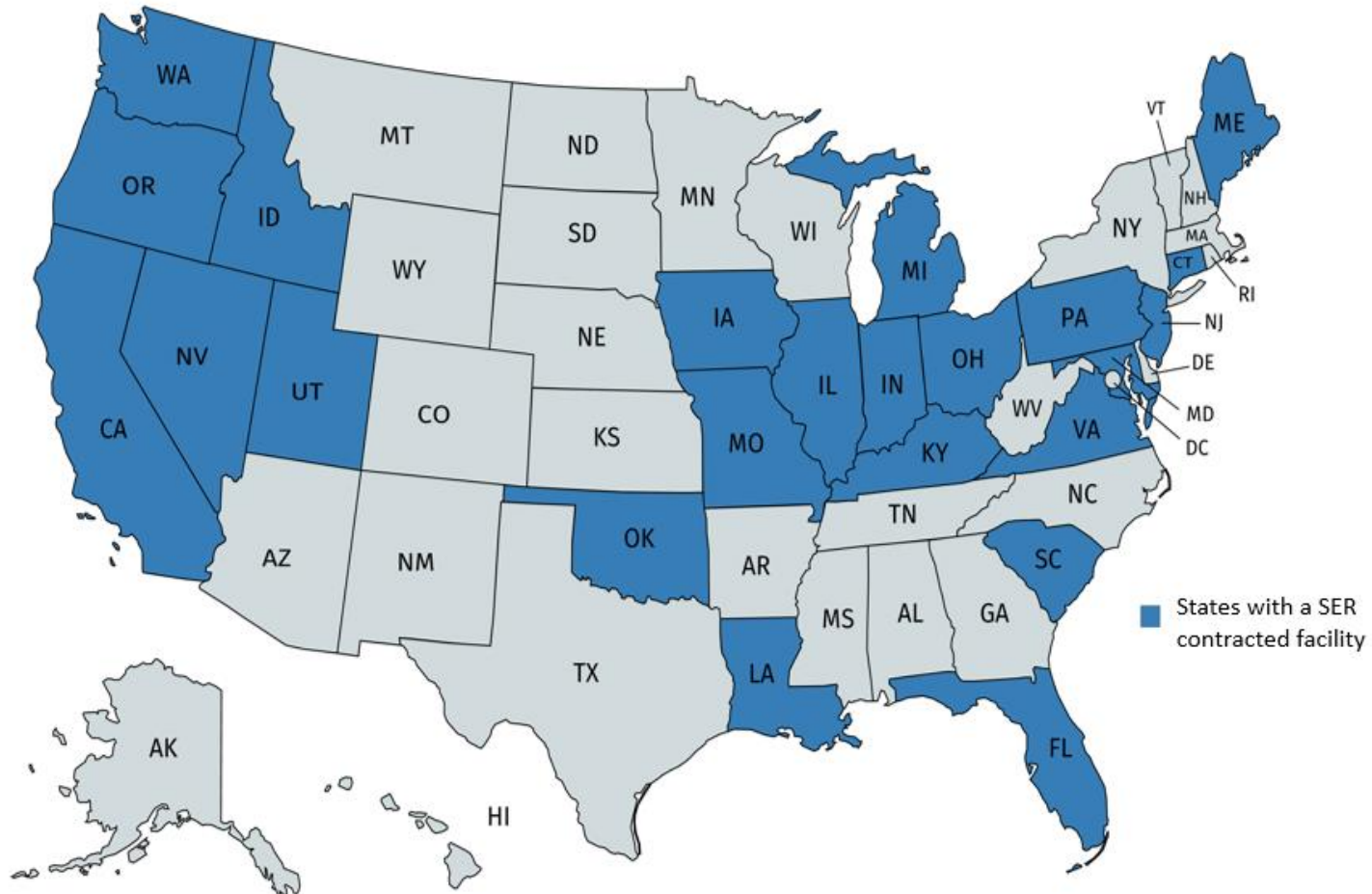
# About SER

- SER Steering Committee, includes representatives from the American Shoulder and Elbow Surgeons (ASES), the American Orthopaedic Society for Sports Medicine (AOSSM), the Arthroscopy Association of North America (AANA), and the American Society for Surgery of the Hand (ASSH).
- 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.

# SER Progress

- Three active modules: Shoulder Arthroplasty, Elbow Arthroplasty & Rotator Cuff Repair
- Over 20,000 procedures submitted across 75 sites currently submitting data in less than a year from the initial launch (October 2018 for 1/3 modules and March 2019 for 2/3 modules)
- 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 to facilitate private practice participation in SER
- SER presented a preview of the first initial SER Annual Report at the American Shoulder & Elbow Surgeons (ASES) October meeting

# SER Progress



# SER Data Element Summary

## Procedure

### Patient

- Name, Date of Birth, SSN
- Diagnosis (ICD-9/10)
- Gender
- Race/Ethnicity
- Weight, Height/BMI
- Payer Status

### Site of Service

- Name and Address (TIN, NPI)

### Surgeon

- Name (NPI)
- Trainee

### Procedure

- Type (ICD-9/10, CPT)
- Date of Surgery, Length of Stay
- Surgical Approach
- Surgical Technique
- Laterality
- Implants (Manufacturer, Lot #)
- Anesthesia

## Comorbidities and Complications

- Comorbidities (ICD-9/10)
- CJR Risk Variables
- Height + Weight/Body Mass Index
- Length of Stay
- American Society of Anesthesiologists Score
- Charlson Index
- Operative and Post-operative Complications

## Patient-reported Outcomes

- PROMIS-10 Global
- VR-12
- ASES
- SANE

## \*Modules Available\*

- **Shoulder Arthroplasty**
- **Elbow Arthroplasty**
- **Rotator Cuff Repair**

# Annual Data Specification Sunset Cycle

Data specifications for each registry are updated to:

- Improve quality of data collected
- Reduce data entry burden
- Grow with the orthopaedic profession

*The **AAOS Registry Data Specification Sunset Cycle** simplifies the transition of data specifications by informing you of when our new data specifications will be released and when we plan to sunset the oldest data specifications.*

This release and sunset cycle will occur *annually*.



# 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

AAOS Registry Program  
**Authorized Vendor**

American Joint Replacement Registry  
 Shoulder & Elbow Registry



Registry Program  
 Improving Orthopaedic Care Through Data





# 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 dashboard
- AAOS RegistryInsights National Benchmarks
- Accreditation Association for Ambulatory Health Care (AAAHC) Advanced Orthopaedic Certification
- American Board of Orthopaedic Surgeons (ABOS) Maintenance of Certification (MOC) Program
- BlueCross BlueShield Blue Distinction Specialty Care
- Blue Shield of California
- Bree Collaborative
- Centers for Medicare & Medicaid Services (CMS) Bundled Payments for Care Improvement Advanced (BPCI-A)
- CMS Comprehensive Care for Joint Replacement (CJR) Model
- CMS Merit-based Incentive Payment System (MIPS) Promoting Interoperability (PI)
- CMS Merit-based Incentive Payment System (MIPS) QPP
- DNV GL Orthopaedic Center of Excellence
- The Alliance QualityPath
- The Joint Commission Advanced Certification for THKR

# Three ways to access data

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RegistryInsights® Dashboards

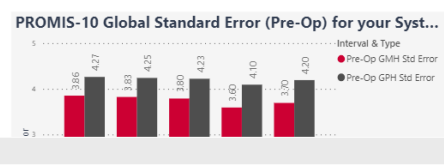
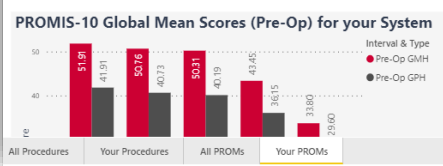
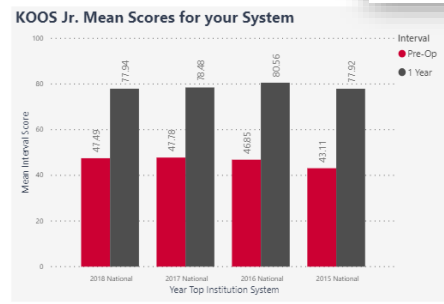
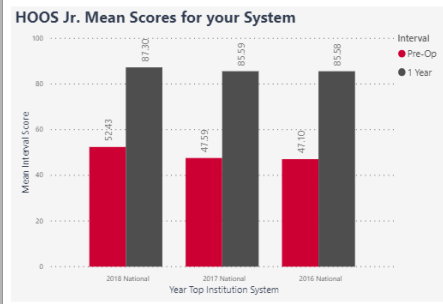
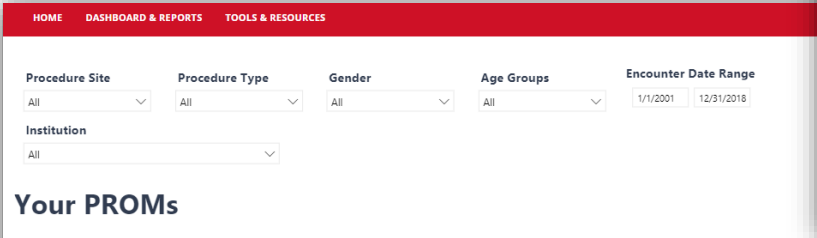
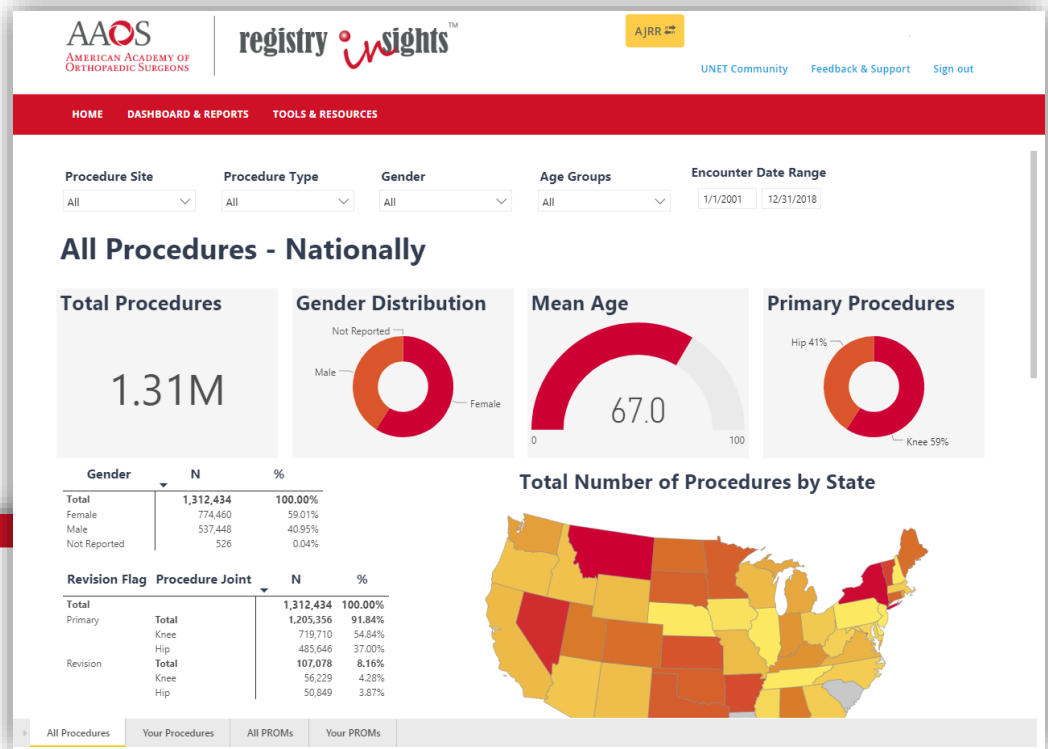
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Registry Analytics Institute™ (RAI)

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Custom Reports

# 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 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

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 / 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	PI	SI	D.
1041062	SER Test Hospital 1	PRP30258	ataAOS	johnny	1/1/1980				Shoulder Arthroplasty	Left	1.		
1041062	SER Test Hospital 1	PRP30258	ataAOS	johnny	1/1/1980				Shoulder Arthroplasty	Left	1.		
1041061	SER Test Hospital 5	PRP30261	Bobby	Ricky	7/16/2019				Rotator Cuff Repair	Left	2.		
1041061	SER Test Hospital 5	PRP30261	Bobby	Ricky	7/16/2019				Rotator Cuff Repair	Right	2/28/2019	1619012200	Bi 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

This form allows AJRR Users to pre-register patients prior to surgery for pre-operative, patient-reported outcome measures (PROMs) data collection. Once the form has been submitted, a patient pre-operative case will be added to the Registry. The pre-registration process permits users to collect PROMs from patients via the AJRR platform through the patient kiosk or through manual entry of a patients' PROMs responses into the platform if collected by paper or clinician/surrogate administration.

**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

**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

Institution

Surgeon

Payer Info

# 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](mailto:Analyticsinstitute@aaos.org)

# Custom Reports

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Custom reports created by our analytics team to help understand and package your site data in an actionable format

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Custom reports can include site specific metrics and shape continuous improvements to the canned dashboards provided

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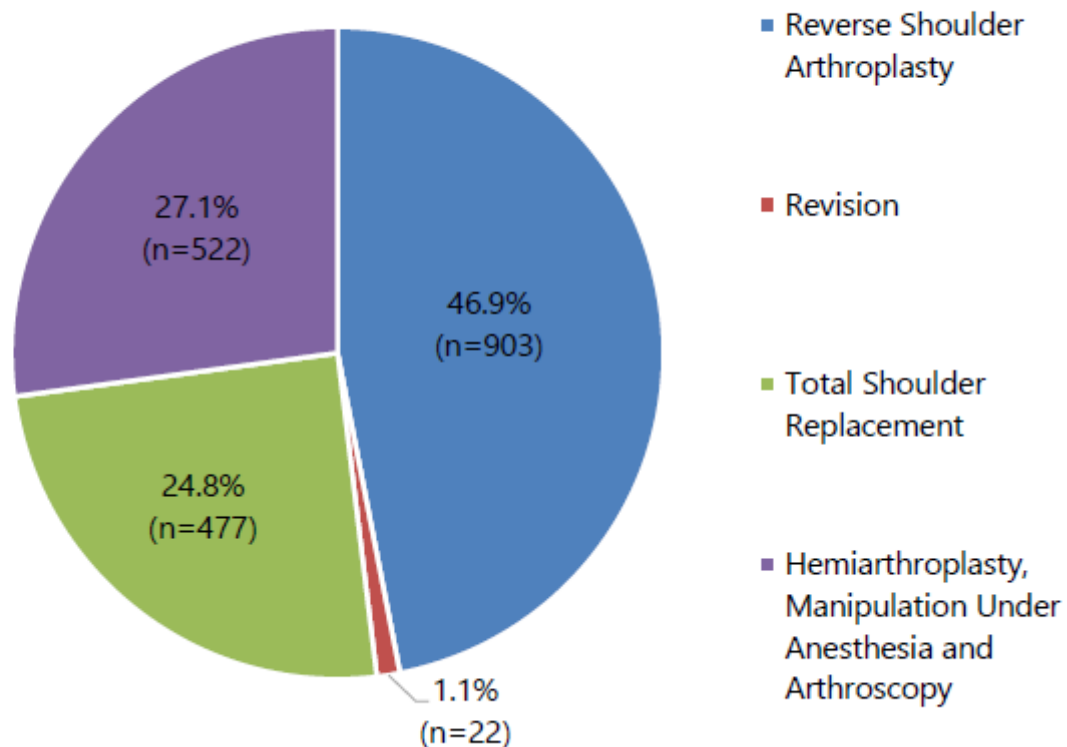
Aggregated Reports and national benchmarks for every metric across all data submitted including procedural, post-operative and PROMs data can be provided at your site level

# Shoulder & Elbow Registry Annual Report Preview

# Shoulder Arthroplasty Preview

Figure 1: Distribution of Shoulder Arthroplasty Procedures, (N=1,924)

- Most procedures were reverse shoulder arthroplasties (46.9%) (Figure 1).
- When examining race, 97.1% of all procedures were done on Caucasian patients.
- Mean age was 62.7 years (SD 16.5) (Figure 2) and 50.4% were females.

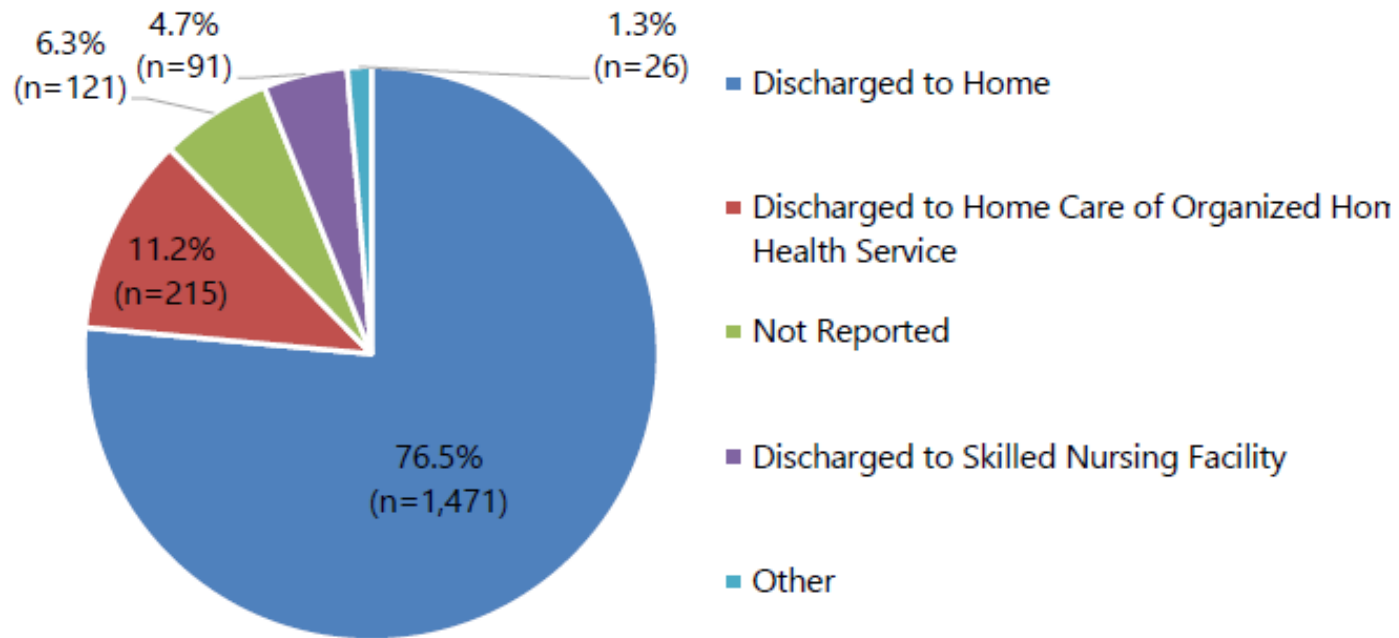




# Shoulder Arthroplasty Preview

**Figure 4: Discharge Disposition of All Shoulder Arthroplasty Procedures (N=1,924)\***

\*SER collects Centers for Medicare and Medicaid Services (CMS) Patient Discharge Status Codes directly from sites of service.

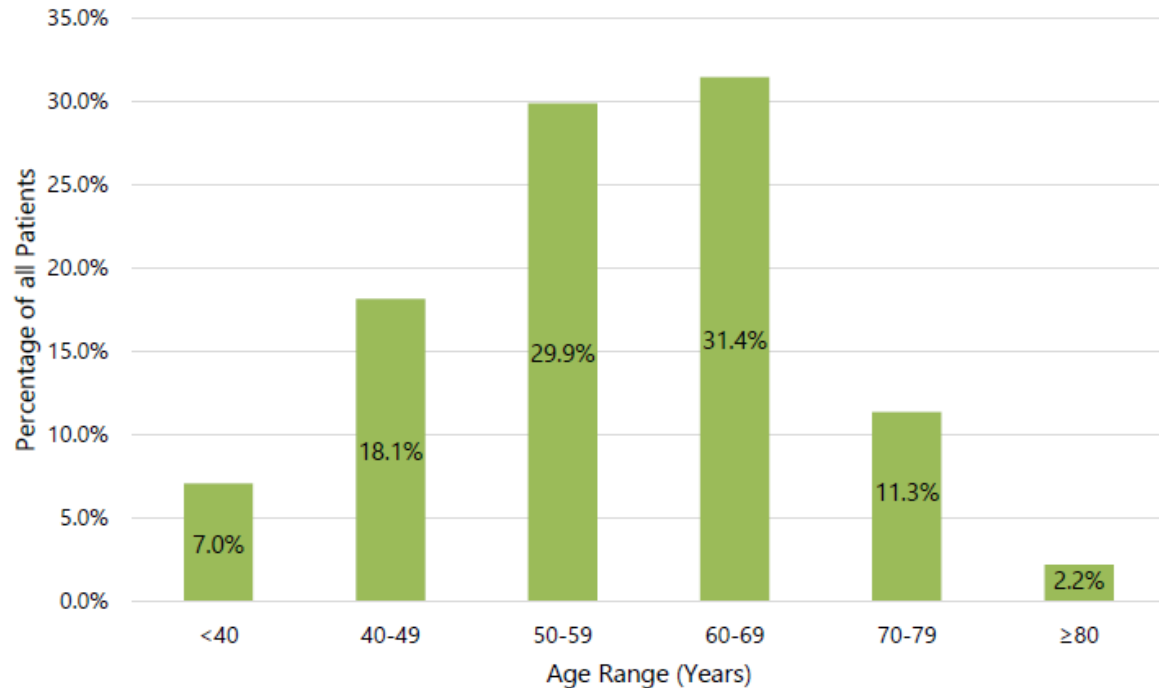


- Within this preview, 45.1% contained a diagnosis of osteoarthritis, 5.8% had a diagnosis of fracture and 2.1% a diagnosis of pain.
- Comparing body mass index (BMI) 80.7% were classified as either pre-obese or obese.
- For discharge disposition, 76.5% were discharged to home (Figure 4).

# Rotator Cuff Repair Preview

- This preview includes over 1,200 rotator cuff repair procedures submitted to SER in 2019, spanning procedures performed 2016 to 2019.
- When examining race, 95.0% of all procedure were done on Caucasian patients.
- Mean age was 57.1 years (SD 11.9) and majority were males.
- 85.0% were classified as either pre-obese or obese and 94.2% were discharged to home.

Figure 5: Age of Patients with a Rotator Cuff Repair Procedure (N=1,279)





# Questions?

Lauren Reidy, Program & Deliverables Manager, Registries [Reidy@aaos.org](mailto:Reidy@aaos.org)

Emily Lee, Registries Coordinator [Elee@aaos.org](mailto:Elee@aaos.org)

[Registryinfo@aaos.org](mailto:Registryinfo@aaos.org)

[www.aaos.org/registries](http://www.aaos.org/registries)