

SER OFFICE HOURS



**THE POWER OF REGISTRY DATA.
AAOS REGISTRIES**



Thank you for joining us today:

The webinar will begin at:
1 PM ET, 12 PM CT, 11 AM MT, 10 AM PT

We look forward to your participation!

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 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

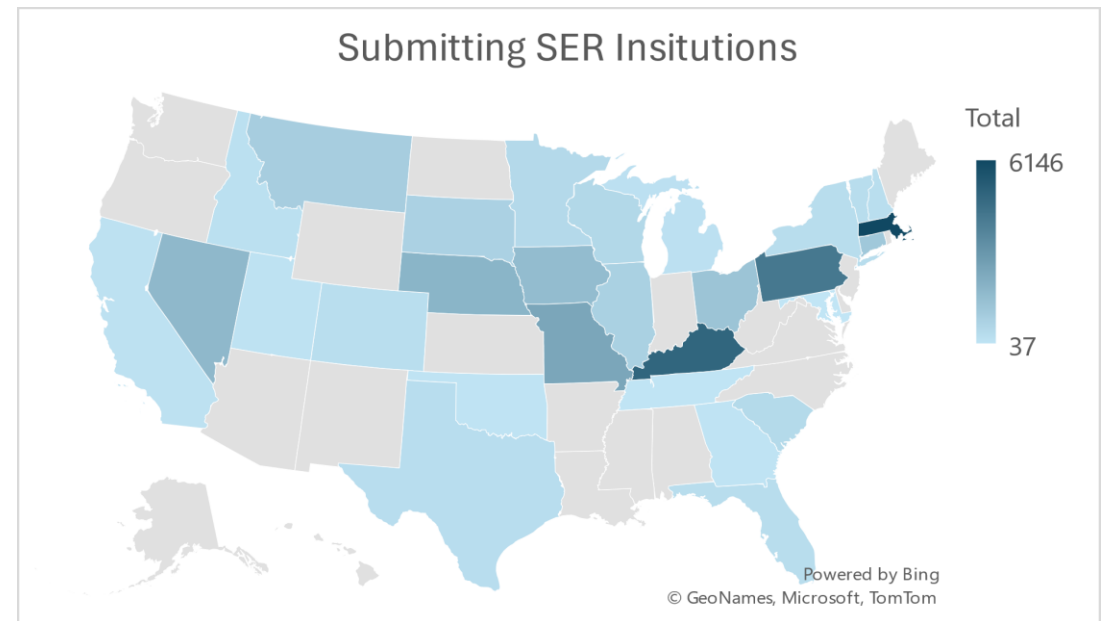
- PROMIS-10 Global
- VR-12
- SANE
- ASES

Three Modules Available

- Shoulder Arthroplasty
- Elbow Arthroplasty
- Rotator Cuff Repair

SER PROGRESS

- Over 55,000 procedures submitted
- Over 140 contracted sites
- Representing over 50,000 unique patient cases



SER HIGHLIGHTS

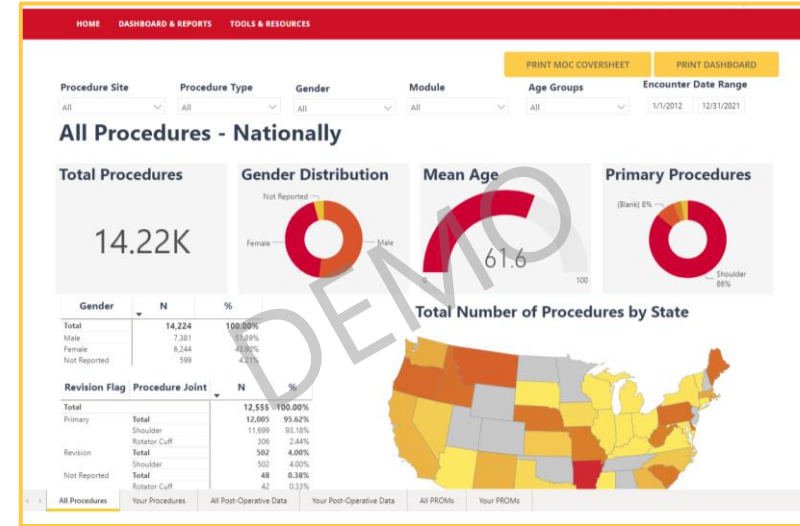
- Access to National Benchmarking on dashboards and reports
- Qualify for quality and accreditation programs
- 5-Year Anniversary of the SER Annual Report coming soon



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



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

The screenshot displays the AAOS registry insights website. The main navigation bar includes: HOME, SEARCH, PRE-REGISTRATION, DASHBOARD & REPORTS, TOOLS & RESOURCES, DATA MANAGEMENT, and ADMINISTRATION. The dashboard shows several report categories: Procedure Reports, Patient Reported Outcomes Reports, Count of Components by Type, Assessment Summary, Count of Procedures by ICD-10 Procedure Codes, Patient Status Report, Count of Procedures, Procedures With C, Shoulder Procedures, and Count of Procedures.

The detailed view shows the PROM Patient Status Report with a table of entries. The table has the following columns: 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, and SURGEON SU.

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	SURGEON 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		

A callout box states: PROM submission can occur via existing site systems/technology, via manual upload, or through the SER PROM solution.

ACCESSING THE SHARP CALCULATOR

AAOS AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS | registry insights®

Feedback & Support | Update Password

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

HOME | FROM HOME | INDUSTRY HOME

- Institution Dashboard
- Reports
- Industry Extract Report
- SHARP Calculator**

View a new statement for data submitters about COVID-19 data in the Announcements section at the bottom of the page.
We are now accepting COVID-19 data. Click the COVID-19 link in the Announcements section at the bottom of this page to learn more.

Stats

Registry Total Procedures
13.46 K

Your Breakdown

- Elbow (0.29 %)
- Invalid Code (3.79 %)
- NR (9.07 %)
- Shoulder (85.04 %)
- Rotator Cuff (1.04 %)

registry insights®

Feedback & Support | Update Password | Sign

REGISTRATION | DASHBOARD & REPORTS | TOOLS & RESOURCES | DATA MANAGEMENT | ADMINISTRATION

Arthroplasty Predictive Model

Complete the form to see two year predicted American Shoulder Surgeons (ASES) Score

Time of Surgery (Years)

Pre-Operative ASES Score

Patient Reported Disability

Alcohol Use

COPD STATUS

Anatomic or Reverse Arthroplasty

Primary or Revision Arthroplasty

Two Year Predicted ASES Result

0

Elbow Surgeons (ASES) Score

Time of Surgery (Years)

Pre-Operative ASES Score

Patient Reported Disability

Alcohol Use

COPD STATUS

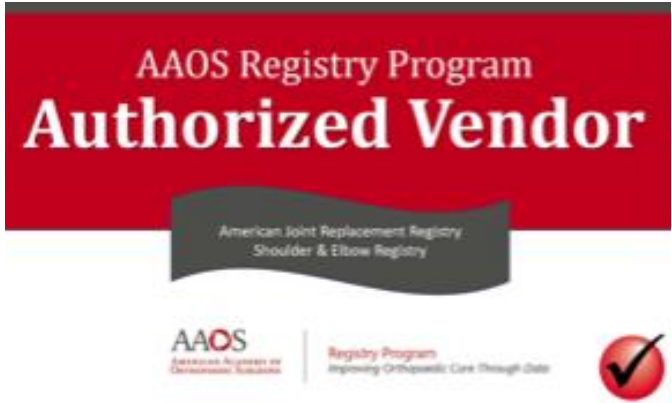
Anatomic or Reverse Arthroplasty

Primary or Revision Arthroplasty

Two Year Predicted ASES Result

91.7

SEE TWO YEAR PREDICTED ASES SCORE



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

HOW TO GET INVOLVED WITH THE SER

Standard SER Participation

- Self-service option for sites.
- Utilize their own resources and technology to extract data from their EHR.
- Format data to match submission specifications.
- Set up regular submission via SFTP pathway or manual upload into Registry Insights.

Authorized Vendor Program

- Partnerships with various EHR and technology vendors.
- Vendors assist in data submission process.
- Extract or send data on behalf of sites.

SER Powered by PatientIQ

- EHR integration option.
- Automatically extract and formats data in alignment with AAOS specifications.
- Submit data monthly to the Registry on behalf of sites.
- Significantly reduces resource burden and time required for onboarding and submission.

**Non-integrated option also offered*

PATIENTIQ INTRODUCTION

Founded in 2016

Headquartered in Chicago, IL

6+ Million Patients Enrolled

500+ Hospitals & Growing

OUR MISSION

- Capture and translate patient outcomes into actionable data
- Drive system-wide quality improvement through outcomes data
- Improve the patient experience with personalized medicine



BENCHMARK

COLLABORATE

IMPROVE

500+ Successful Implementations

20+ EHRs Supported

"I have overseen countless healthcare technology implementations, and PatientIQ's was remarkably smooth end-to-end. The way their technology seamlessly integrated with our existing systems and workflows was truly impressive."

Tatiana Arreglado, D.N.P., M.S.N., R.N.
 Director - Information Technology Clinical Optimization and Process Improvement
 University of Miami Health System



THE POWER OF REGISTRY DATA.
AAOS REGISTRIES





Automated Data Collection

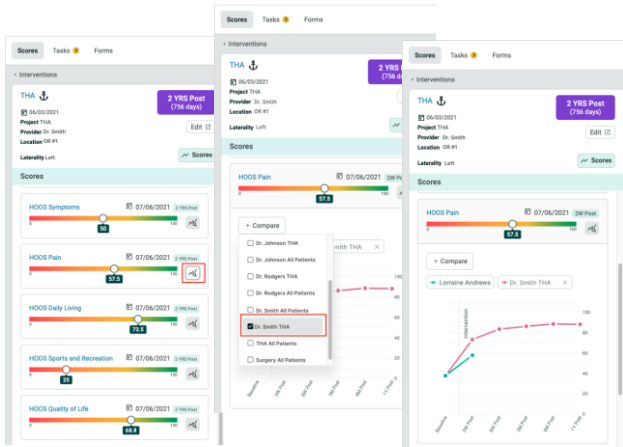
EHR-integrated data abstraction
Automated PRO collection

Real-time Insights

Benchmarking
EHR-embedded scores data

Enterprise-Wide Analytics

PatientIQ reporting dashboards
Advanced analytics



THE POWER OF REGISTRY DATA.
AAOS REGISTRIES



SER POWERED BY PATIENTIQ

AAOS has partnered with PatientIQ to make it easier than ever to participate in the registries

Registry Participation Options

	Standard SER Participation	AAOS Authorized Vendor Program	SER powered by PatientIQ*
1. Automated collection of procedure data			✓
2. Automated collection of patient-reported outcomes data		✓	✓
3. EHR-embedded forms to collect optional surgical information			✓
4. Data aggregation and translation to meet registry specifications		✓	✓
5. Automated monthly submission to AAOS		✓	✓

**Pricing available upon request, option to leverage PatientIQ for larger patient-reported outcomes solution or for registry participation only*

AUTOMATED PATIENT ENROLLMENT

1

IDENTIFY

2 ELIGIBLE PATHWAYS DETECTED

Visit Location: OR #1

Surgery Type: Shoulder Arthroplasty

Attending Provider: Dr. Smith

2

ENROLL

SER Elbow Arthroplasty Pathway

Enroll

SER Rotator Cuff Repair Pathway

Enroll

SER Shoulder Arthroplasty Pathway

Enrolled

3

ENGAGE

PROMIS Global

Pre-op, 3M, 6M, 1Y+

ASES

Pre-op, 3M, 6M, 1Y+

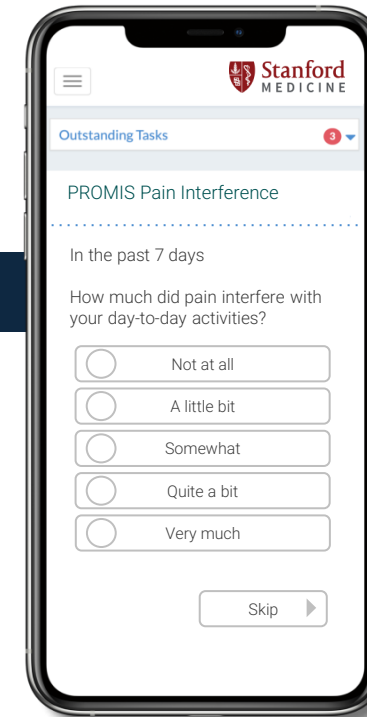
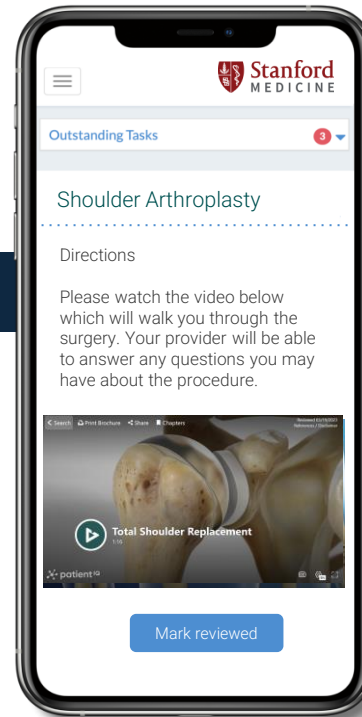
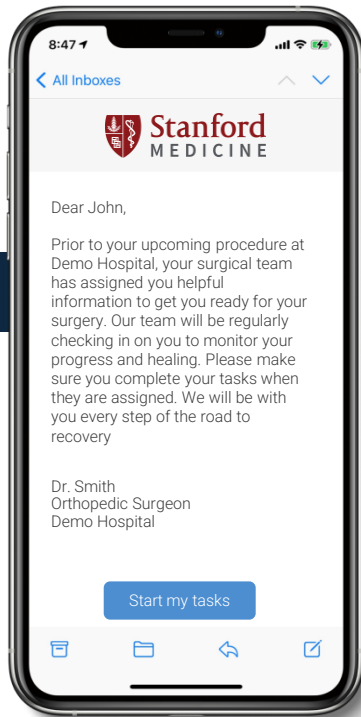
SANE

Pre-op, 3M, 6M, 1Y+

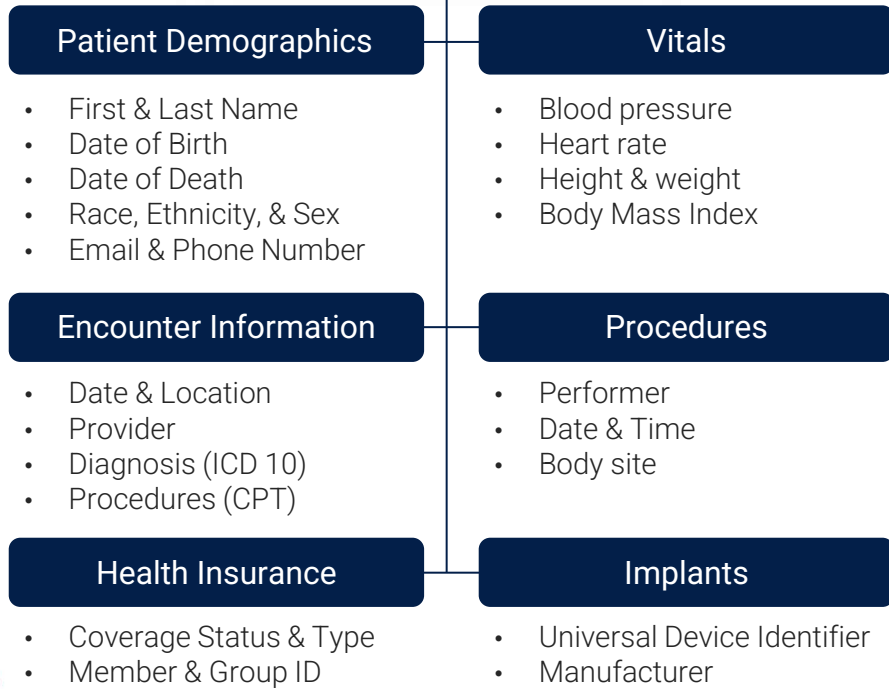
PROMIS Pain Interference

Pre-op, 3M, 6M, 1Y+

AUTOMATED PRO DATA COLLECTION



AUTOMATED PROCEDURE DATA COLLECTION



Test Logic
Sex Female Age 23 DOB 01/01/2000 MRN 0101010101

Scores Tasks Messages **Forms**

< FTR Ankle Module

Edit Form

* Required fields are marked by an asterisk.

Procedure Date *
6 / 6 / 2023

Patient Information

Patient Institution ID
010101911

Patient SSN *
XXXXXXXX

Cancel Save (In Progress) Submit

SER forms are embedded directly in the EHR and auto-populated with all data required for submission

OPTIONAL SUPPLEMENTAL DATA COLLECTION

The screenshot shows the Epic EHR interface for a patient named Abby Anesthesia. The patient's demographic information is visible: Female, 57 y.o., MRN: 0119291, Bed: 123-02. The 'Forms' tab is active, displaying a form for 'Shoulder Arthroplasty'. The form includes the following sections and options:

- Patient Specific Instrumentation:**
 - Yes
 - Not Reported
 - No
- Surgical Approach:**
 - Delta Pectoral
 - Other
 - Other Superior
 - Not Reported
- Surgical Technique:**
 - Tenotomy
 - Lesser Tuberosity Osteotomy
 - Peel off
 - Not Reported
- Was the subscapularis tendon addressed in the reverse shoulder arthroplasty?:**
 - Yes
 - Not Reported
 - No

At the bottom of the form, there are three buttons: 'Cancel', 'Save (In Progress)', and 'Submit'.

Care teams can populate EHR-embedded forms at the point of care with surgical approach and technique

AUTOMATED SUBMISSION TO SER

PatientIQ will aggregate, validate, transform, and submit data to SER monthly



CONTACT THE AAOS REGISTRY PROGRAM

- **General:** RegistryInfo@aaos.org
- **Contracts, Invoicing, & Onboarding:** RegistryEngagement@aaos.org
- **Business Hours:** Monday through Friday, 8 a.m. to 4 p.m. Central Time

Thank You!