



Registry Overview

January 16, 2019



Shoulder & Elbow Registry Improving Orthopaedic Care Through Data

Introductions

Presenters

Kristina Finney, MPH Senior Manager, Registry

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Registry Support Specialist

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Shoulder & Elbow Registry

Improving Orthopaedic Care Through Data

Registry Program Overview

Quality Vision



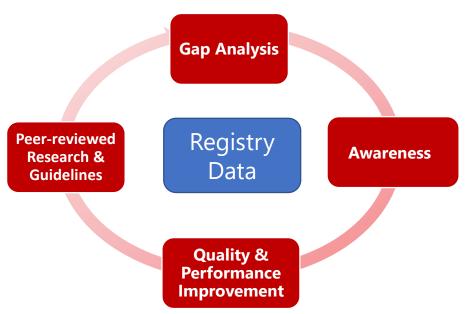
Registries

- component of a larger quality vision
- provide data to inform AAOS guidelines and test performance measures
- provide feedback to providers to continuously improve their practice and healthcare outcomes
- allow AAOS to define what quality means in a value-based system
- reduce the reporting burdens on physicians
- help inform gaps in knowledge or areas for further education

"If you can't measure it, you can't improve it" ~ Drucker



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



Registry Program Highlights

June 2017
Investment
Approved

October 2017

AJRR

Re-integration

October 2018
Shoulder & Elbow
Registry Launch

December 2018

Musculoskeletal

Tumor Registry

Launch

- The American Joint Replacement Registry (AJRR) was re-integrated into AAOS
- The Registry Oversight Committee (ROC) was created
- Additional staff hired and physician leadership groups created
- Shoulder & Elbow Registry developed
- Strategy for building a scalable and sustainable Registry Program developed
- Revamp of data specifications and problem-solving for improved data capture within AJRR including release of revised specification



AAOS Family of Registries

AAOS Board of Directors

Registry Oversight Committee

Future Registry

Shoulder & Elbow Registry (SER)

Shoulder Arthroplasty Rotator Cuff Repair (2019) Elbow Arthroplasty (2019)

American Joint Replacement Registry (AJRR)

Hip Arthroplasty Knee Arthroplasty Musculoskeletal Tumor (MsT) **Registry Pilot**

Orthopaedic Oncology



Future Registry

Data Insights for Orthopaedics

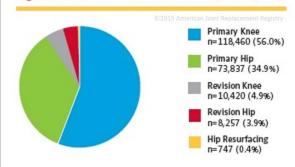
Detail Surgeon Activities and Case Numbers

Table 1: 2014 Average Procedural Volume for Participating Surgeons (N=2,247)

	Total Surgeons	Total Procedures	Per Surgeon Average	Range	Number of Surgeons Who Submitted Only One Procedure
HIP					
Primary	1,822	42,249	23.2	1-317	295
Revision	757	4,624	6.1	1-76	229
KNEE					
Primary	1,617	64,552	39.9	1-522	182
Revision	1,045	6,143	5.9	1-103	308

Provide Distribution of Procedures

Figure 12: Distribution of Procedures (N=211,721)





Characterize US Implant Usage Patterns

Table 2: Frequency and Percentage of Femoral Head Sizes Implanted by Year (N=74,833)

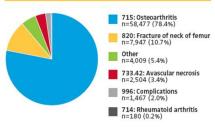
	2012 n(%)	2013 n(%)	2014 n(%)
<28mm	537 (4.9)	704 (3.2)	1,176 (2.8)
28mm	1,049 (9.6)	2,902 (13.2)	5,752 (13.7)
32mm	3,112 (28.5)	6,025 (27.4)	10,790 (25.7)
36mm	4,890 (44.8)	9,828 (44.7)	19,607 (46.7)
40mm	808 (7.4)	1,165 (5.3)	2,225 (5.3)
>40mm	515 (4.7)	1,363 (6.2)	2,435 (5.8)
Total	10,911	21,987	41,985

Excludes hemiarthroplasty

AAOS AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

Show Top Reasons for TJA Procedures

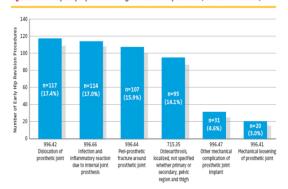
Figure 14: ICD-9 Diagnosis Codes for All Hip Arthroplasty Procedures (N=74,584)



Other codes include those in categories 716, 719, 733, 736, 755. See Appendix D for complete list of diagnosis codes included in each category.

Characterize Causes of Early Revision

Figure 27: Most Frequently Reported ICD-9 Diagnosis Codes for Hip Revisions (<3 Months to Revision)





Shoulder & Elbow Registry

Improving Orthopaedic Care Through Data

Data Collection

Shoulder Arthroplasty Module Data Elements

Procedural

Patient

- Name (Last, First)
- Date of Birth
- Social Security Number
- Diagnosis (ICD-10)
- Gender
- Race/Ethnicity
- Payer Status

Hospital/Practice

Name and Address

Surgeon

Name (National Provider Identifier)

Procedure

- Type (ICD-10)
- Date of Surgery
- Laterality
- Implants

Post-op/Comorbidities

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

Patient-reported Outcomes

- PROMIS-10 Global
- VR-12
- SANF
- ASES

First module around Shoulder Arthroplasty launched October 24, 2018

Future modules around Rotator Cuff Repair and Elbow Arthroplasty in 2019



Patient-Reported Outcomes

Supported PROMs for SER

Functional

PROMIS-10 Global VR-12

Anatomical

SANE ASES

- We collect only these four
- Sites are not required to submit but at least one is recommended
- Submission can be done manually or automatically with our online kiosk



Data Specification & Dictionary



2018 AAOS Shoulder & Elbow Registry - Shoulder Arthroplasty
Data File Submission Layouts & Information

Version 1- October 2018

Summary

This document is a file format and data field specification guide for submitting to the American Academy of Orthopaedic Surgeons (AAOS) Shoulder & Elbow Registry (SER) - Shoulder Arthroplasty.

Data Submission Tab Descriptions

Change Control

Summary of all changes since original version, listed by date.

Procedure Layout

This is the core data file submitted to AAOS SER by participating healthcare institutions.

PostOp Layout

File submission format for patients that have been readmitted within 90-days of actual procedure date.

PROMs Lavout

Pre-Operative and Post-Operative survey patient reported outcome (PRO) responses.

Replacement Trigger Codes

Acceptable ICD-10 PCS codes for Shoulder Arthroplasty & Proximal Fracture Surgical procedures as related to the specific patient row being submitted. There can be up to 10 submitted.

Revision Trigger Codes

Acceptable ICD-10 PCS codes for revision procedures relating to Shoulder Arthroplasty & Proximal Fracture Surgical procedures as related to the specific patient row being submitted. There can be up to 10 submitted.

Supplement Trigger Codes

Acceptable ICD-10 PCS codes for revision of the Acetabular Liner as related to the specific patient row being submitted. For shoulder revision, appropriate removal code (see ICD-10 Removal code) and subsequent supplement code may be reported. For example: Liner Exchange in Revision Shoulder Arthroplasty. There can be up to 10 submitted.

CPT Trigger Codes

Acceptable CPT codes for all Shoulder Arthroplasty procedures as related to the specific patient row being submitted. There can be up to 10 submitted.

Dx - Shoulder Codes

Common ICD-10-CM Diagnosis codes for shoulder. The Registry will accept any valid patient primary and secondary diagnosis codes. There can be up to 10 submitted.

Procedure Layout PostOp Layout PROMs Layout Replacement Trigger Codes Revision Trigger Codes Supplement Trigger Codes



ORTHOPAEDIC SURGEONS

Change Control

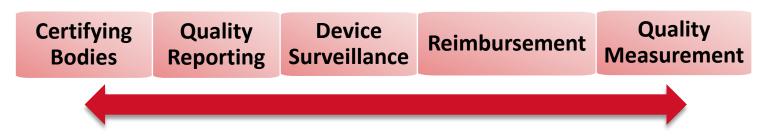
DX-Joint Prosth

DX-Shoulder Codes

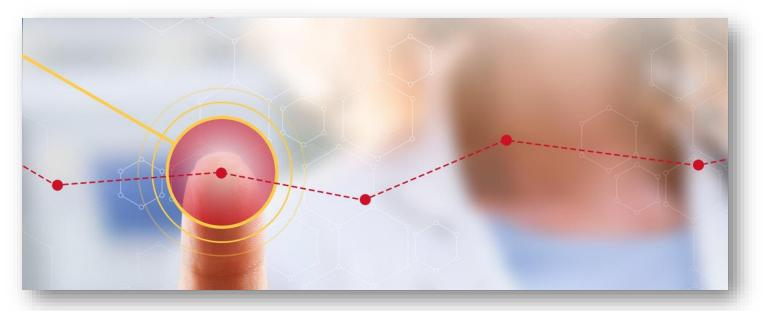
CPT Trigger Codes

Re-use of Registry Data

- Calculate national performance benchmarks
- Access to on-demand practice specific quality reports and dashboards to compare locally, regionally, and nationally
- Track and monitor outcomes with longitudinal patient information
- Reduce complications and revision rates across sites
- Support quality initiatives and participation in payer incentivized QI
- Improve data to support orthopaedic care and best practices
- Allow for re-use of data towards programs like MIPS, MOC, CME, TJC







Onboarding

SIX STAGES TO SUCCESSFUL SUBMISSION

STAGE 1

Welcome & Kick-Off STAGE 2

Account Setup STAGE 3

Build & Validate Extract

STAGE 4

Test File **STAGE 5**

Live Data STAGE 6

Transition to Ongoing Support

Deliverables:

- **1.1** Participant Profile Updates
- **1.2** Onboarding Resource Assignment
- **1.3** Welcome Communication
- **1.4** Registry Program & Participant Kick-Off
- **1.5** Participant Onboarding Workbook

Deliverables:

- **2.1** Participant Account Setup
- Key Contacts
- Surgeon Information
- SFTP/HTTPS

Deliverables:

- **3.1** Participant Documentation Review
- **3.2** Participant Extract File Requirements Preparation
- Source System Identification / Mapping
- *Q&A*
- **3.3** Participant builds extract file
- **3.4** Participant validates extract file against source system
- **3.5** Participant Automates File Transfer

Deliverables:

- **4.1** Test File Call / Questions Response
- **4.2** Test File Round 1
- **4.3** Test File Round 2
- **4.4** Test File Final Certification

Deliverables:

- **5.1** Participant Final Production Set-Up **5.2** Live Data Submission [FIRST]
- **5.3** Live Data Submission Confirmation

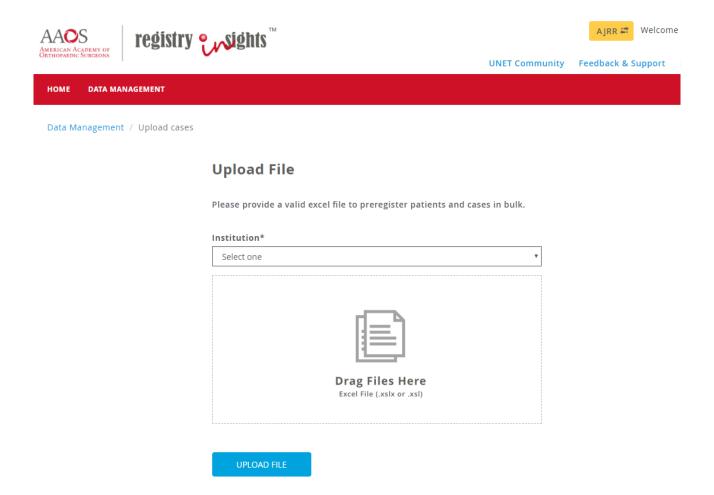
FILE1

Deliverables:

- **6.1** Subscriber Training & Access –
- Authorized User **6.2** Subscriber
- Training & Access PRO
- Platform
- **6.3** Support Process &
- Marketing Resources
- Review



Data Submission Options





Submission Best Practices

- You can monitor data submission uploads and errors by logging into <u>RegistryInsights™</u>
- On Homepage: Latest file Upload
 - Indicates when the last file was uploaded
 - Number of cases submitted
 - Number of cases with issues
 - Option to correct & resubmit
- Most participants submit monthly but we encourage submitting at least every 90 days
- We can work with your site's technology team or vendor to set-up automated submissions





Shoulder & Elbow Registry

Improving Orthopaedic Care Through Data

Getting Started

Contracting

- Master Participation Agreement
 - Simple 2-page appendix for current AJRR participants
- Business Associate/Data Usage Agreement
- Security Assessment

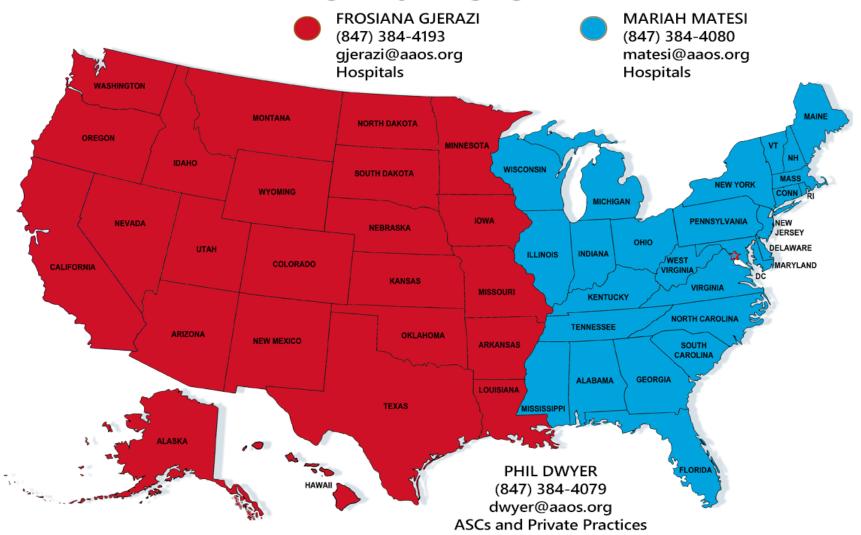


Participation Fee Structure

- Single institution, 1-year licensing fee \$3,500
- \$750 1x configuration fee
- Discounts are available
- Includes
 - ✓ Unlimited access to RegistryInsightsTM dashboards and reports
 - ✓ PRO Platform can administer surveys
 - Ongoing support
 - ✓ Inclusion in User Group Network (Unet)



Contact Your Registry Engagement Associate







Shoulder & Elbow Registry

Improving Orthopaedic Care Through Data

Thank you!



"RegistryInsights Surgeon Dashboards 101"

Date: 2/13/2019

Time: Noon CST

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Commonly Asked Questions

Data Submission

- What is the format of data to be uploaded?
- How often should a site submit?
- Are all data elements required?
- If a site is utilizing a 3rd party to collect data, is it necessary to collect the same data twice?

Participation and Fees

- How much does it cost to participate?
- Are fees for each Registry separate?

PROMS

- What Patient-Reported Outcomes are collected? Are all mandatory?
- At what intervals are PROMS collected?
- Can a site choose which PROM to use?
- How are PROMs submitted?

