AAOS
AMERICAN ACADEMY OF
ORTHOPAEDIC SURGEONS

Registry Program
Improving Orthopaedic Care Through Data

Shoulder & Elbow Registry (SER) Update

AAOS Family of Registries

AAOS Board of Directors

Registry Oversight Committee

| Future Registry | Shoulder & Elbow Registry (SER) | American Joint Replacement Registry (AJRR) | Musculoskeletal Tumor (MsT) Registry Pilot | Future Registry |

Shoulder Arthroplasty
Rotator Cuff Repair
Elbow Arthroplasty

Hip Arthroplasty
**Knee Arthroplasty**

Orthopaedic Oncology
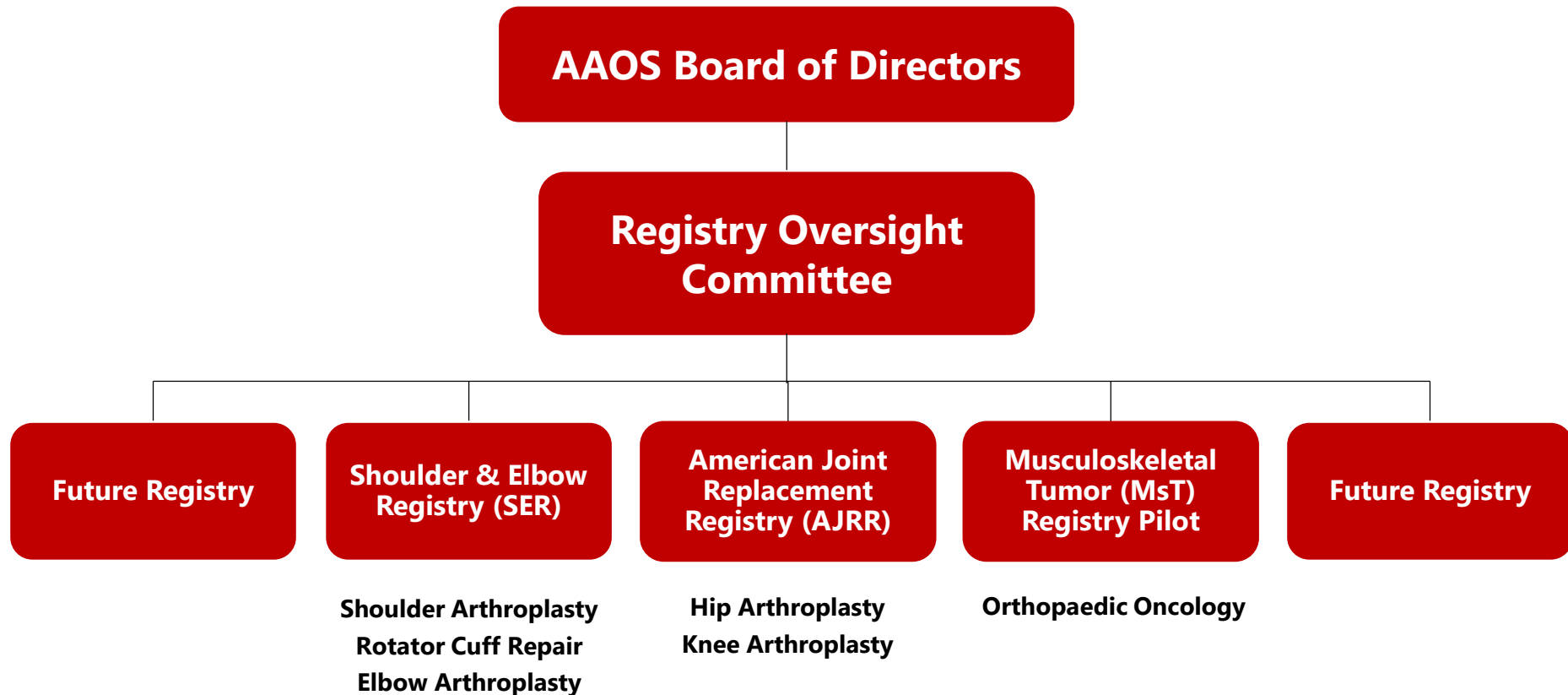
About SER

- 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

States with a SER contracted facility
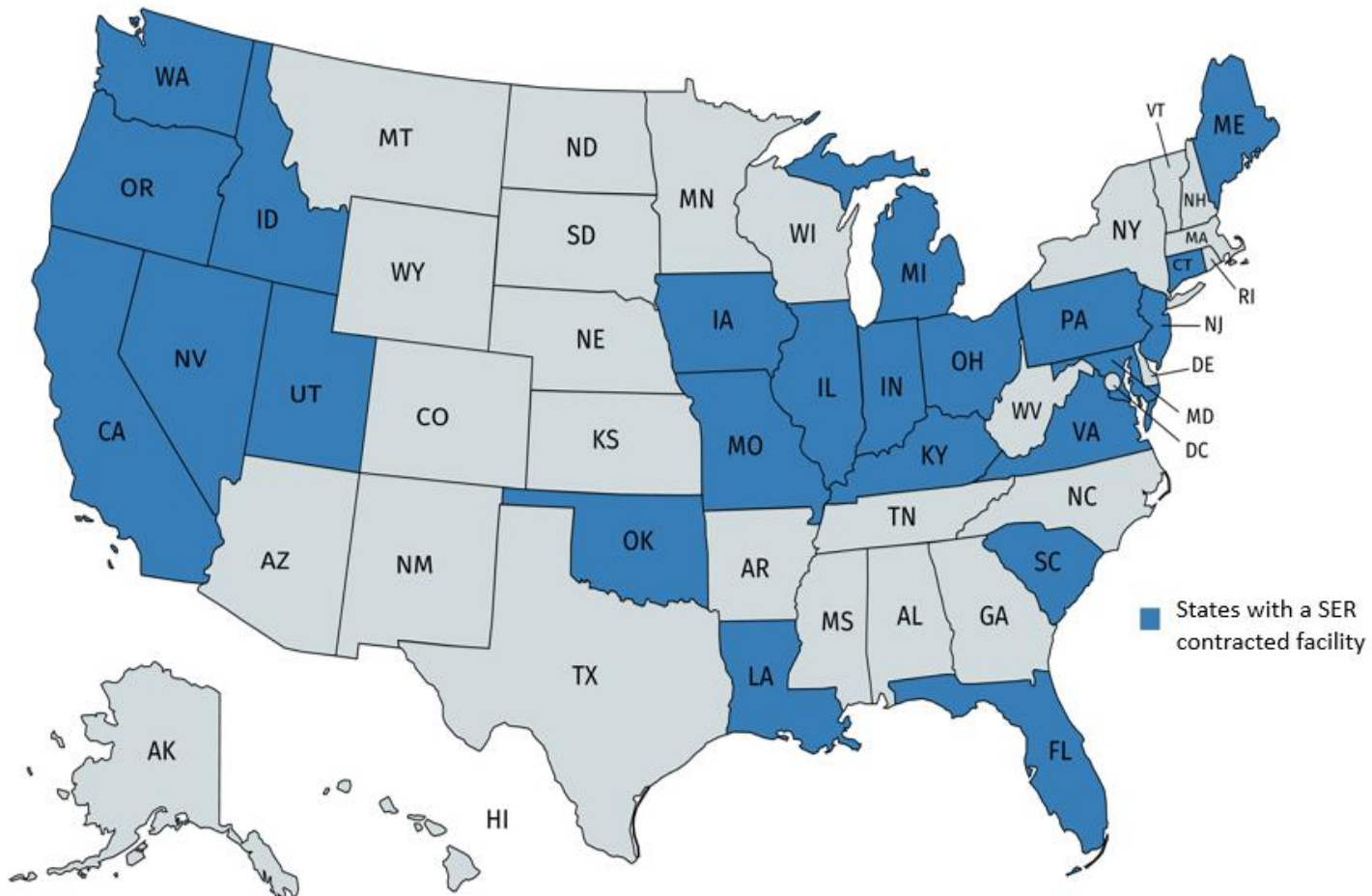
SER Data Element Summary

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**

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Shoulder & Elbow Registry
Improving Orthopaedic Care Through Data

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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*.

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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

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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

RegistryInsights® Dashboards

Registry Analytics Institute™ (RAI)

Custom Reports

RegistryInsights Dashboards
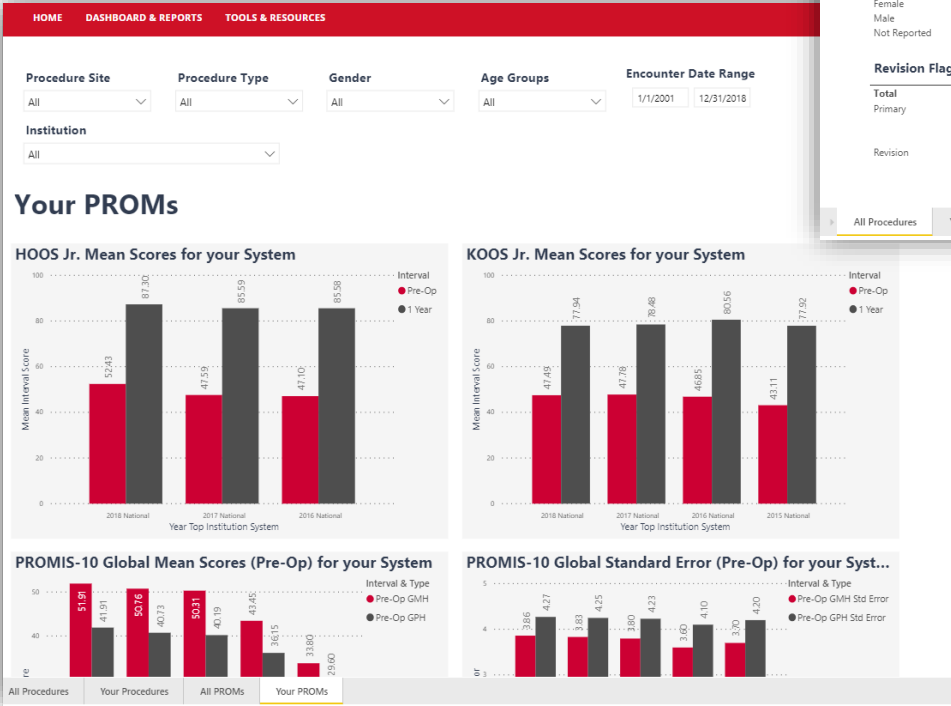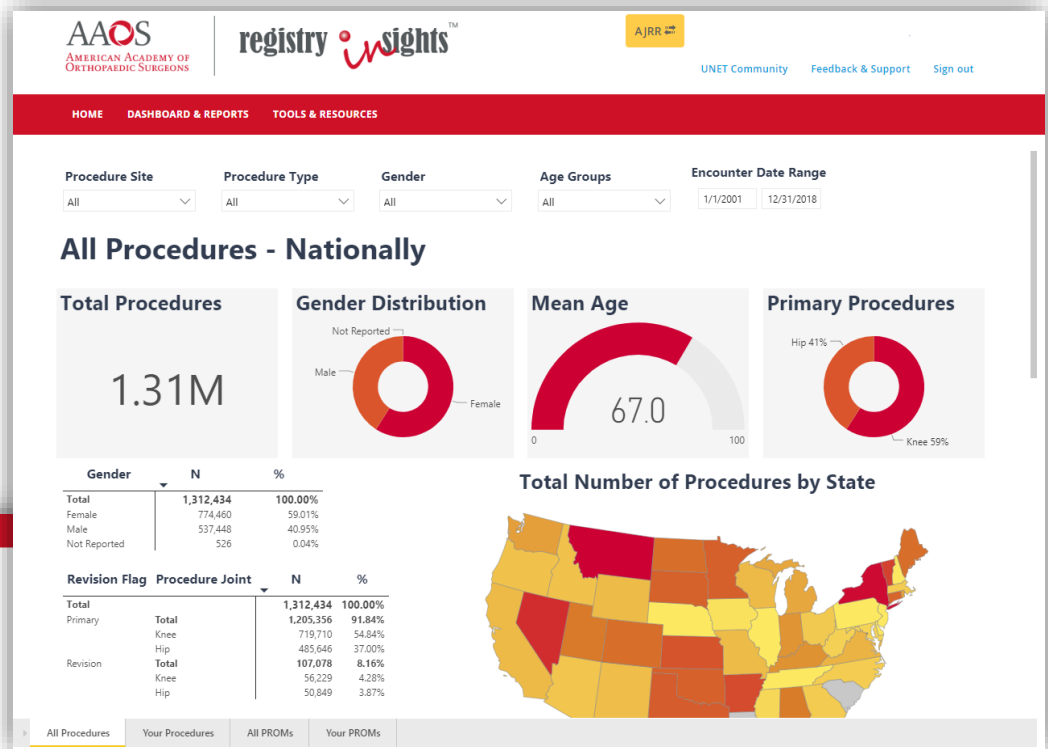
- On-demand practice specific dashboards

- Compare your practice to national performance benchmarks

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

PROM Management

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: Analyticsinstitue@aaos.org

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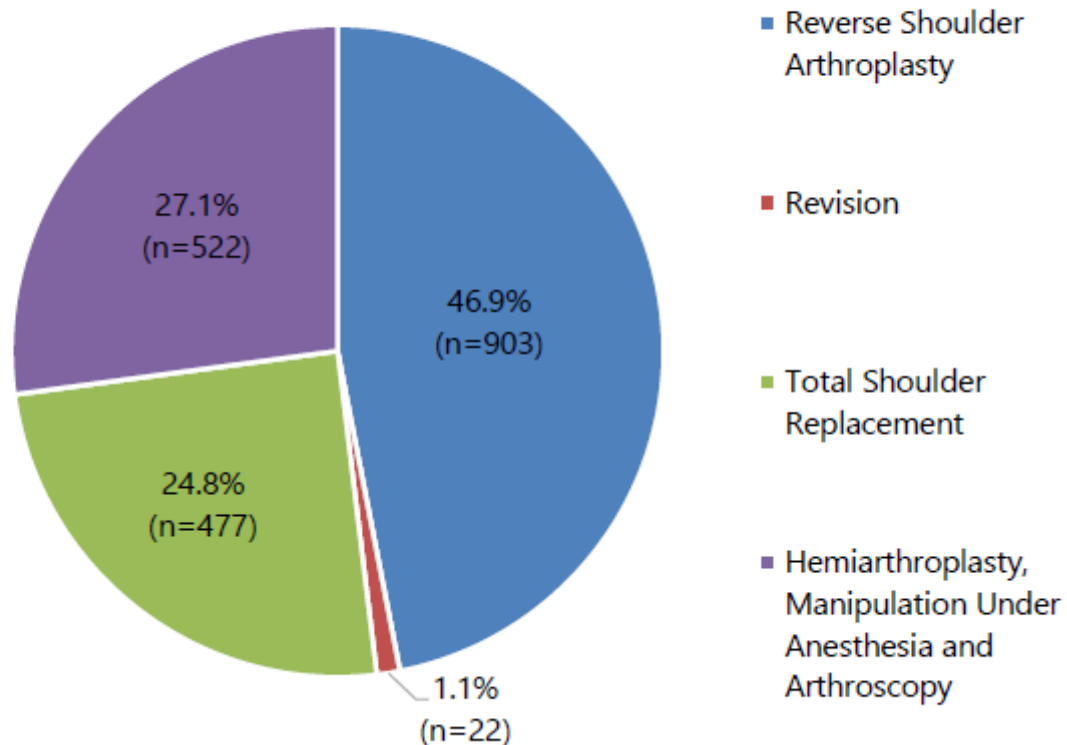
Aggregated Reports and national benchmarks for every metric across all data submitted including procedural, post-operative and PROMs data can be provided at your site level

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Shoulder & Elbow Registry Annual Report Preview

Shoulder Arthroplasty Preview

- 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.

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

- ■ Reverse Shoulder Arthroplasty — 46.9% (n=903)
- ■ Revision — 1.1% (n=22)
- ■ Total Shoulder Replacement — 24.8% (n=477)
- ■ Hemiarthroplasty, Manipulation Under Anesthesia and Arthroscopy — 27.1% (n=522)

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.
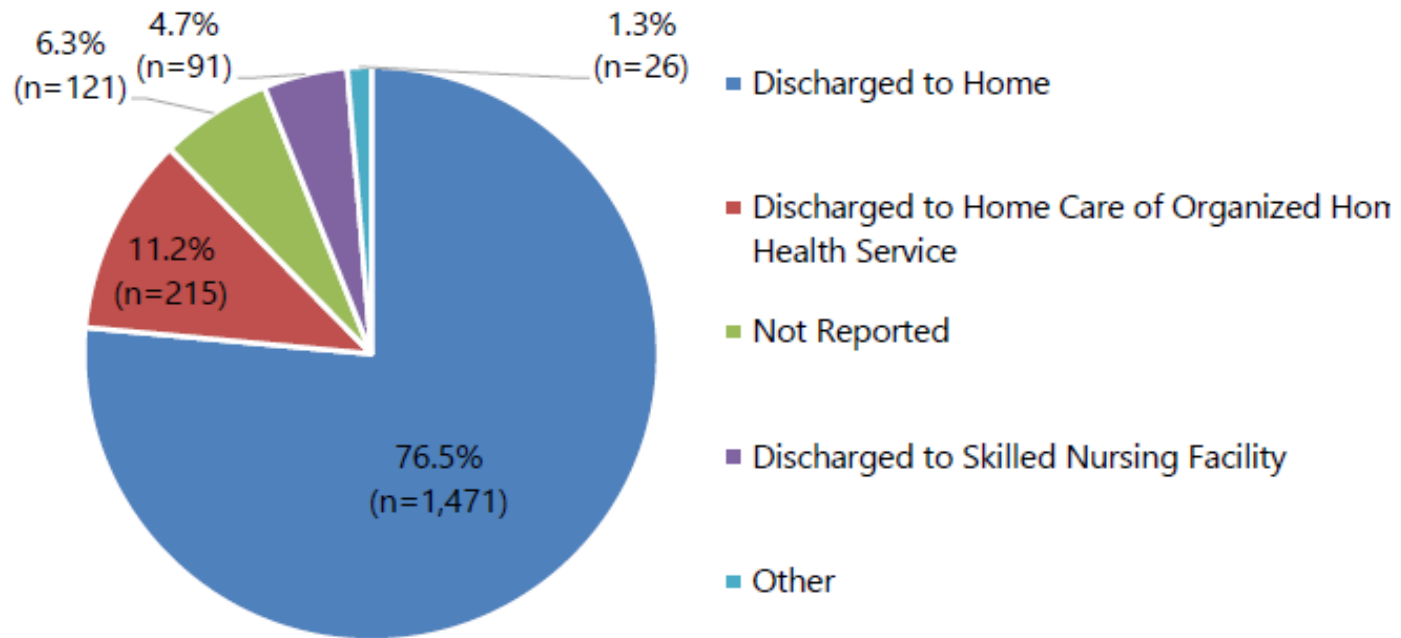

- Within this preview, 45.1% contained a diagnosis of osteoarthritis, 5.8% had a diagnosis of fracture and 2.1% a diagnosis of pain.

- 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)
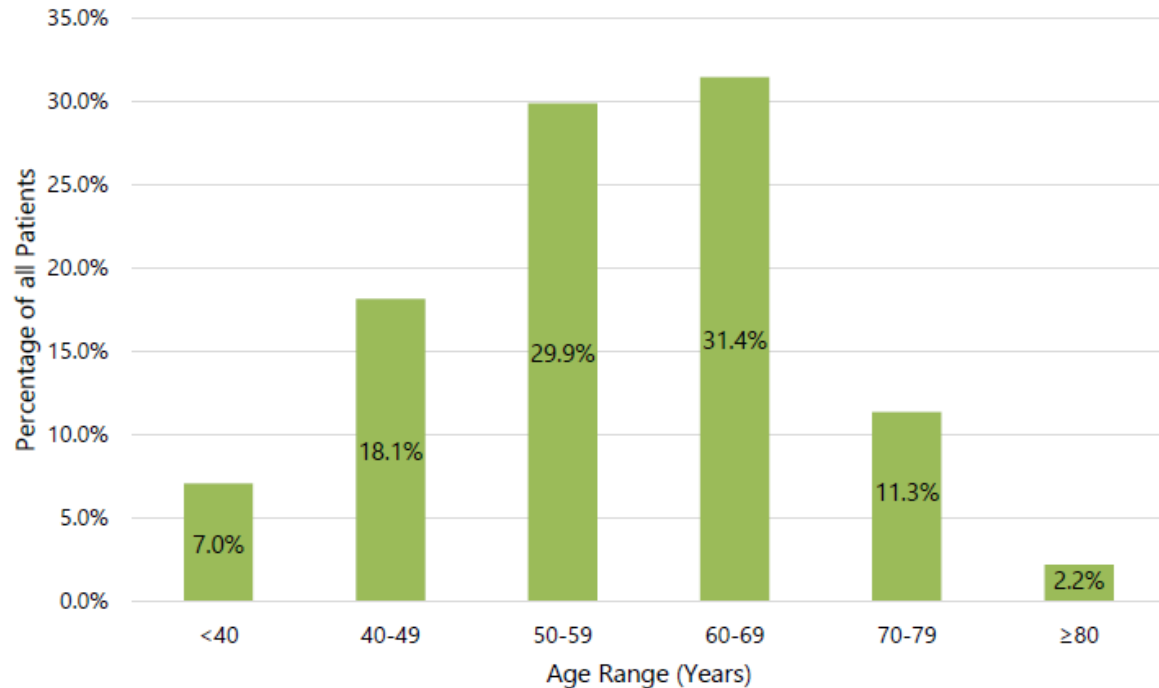
Questions?

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