# AAOS

**American Academy of Orthopaedic Surgeons**

## Registry Program
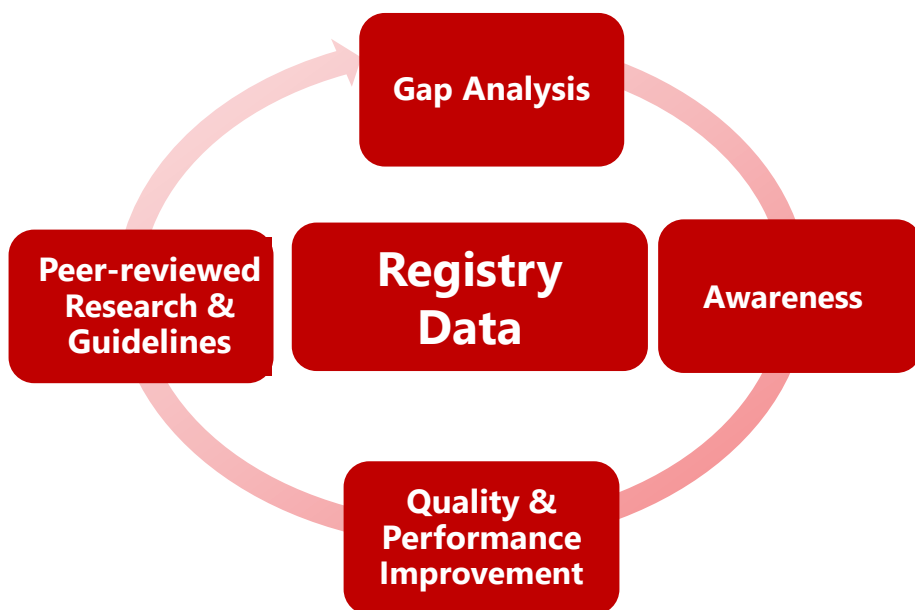*Improving Orthopaedic Care Through Data*

# How to Be a Pro at PROMs

AAOS Registry Program

March 20, 2019

# Introductions

- Ryan Olsen, Optimization Manager

- Mariah Matesi, Senior Registry Engagement Associate

- Frosiana Gjerazi, Registry Engagement Associate

# 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**

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# AAOS Registry Program

- Clinical data on Hip and Knee (AJRR) and Shoulder (SER)
- National benchmarks for measurement
- Quality reports and dashboards
- Support for quality initiatives to help define and improve standard of care
- Device surveillance
- Work with organizations and individuals to help meet and maintain certification criteria.

# Registry Data Elements

## Procedural

**Patient**
- Name (Last, First)
- Date of Birth
- Social Security Number
- Diagnosis (ICD-9/10)
- Gender
- Race/Ethnicity

**Hospital**
- Name and Address

**Surgeon**
- Name (National Provider Identifier)

**Procedure**
- Type (ICD-9/10)
- Date of Surgery
- Laterality
- Implants

**Other**
- Comorbidities (ICD-9/10)
- Height & Weight/Body Mass Index
- Length of Stay
- American Society of Anesthesiologists Score
- Operative Complications

## Post-Op

**Patient, Hospital, Surgeon, and Procedure Data Elements needed for matching**

**Post-operative Complications**
**90-day Re-admission**

- Re-admission Diagnosis (ICD-9/10)
- Re-admission procedure type (ICD-9/10)
- Re-admission date/discharge date

## PROMs

**Patient, Hospital, Surgeon, and Procedure Data Elements needed for matching**
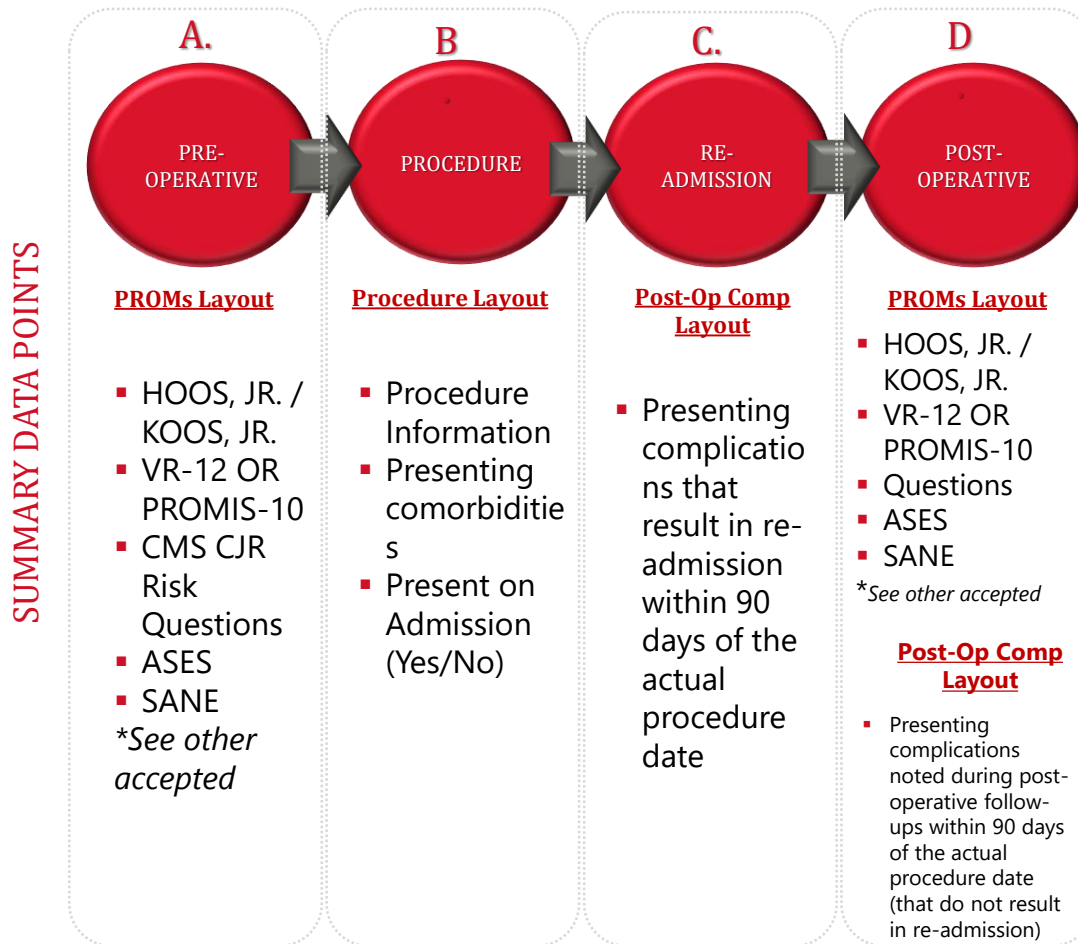
**Patient-reported Outcomes**
*Recommended:*

- PROMIS-10 Global
- VR-12
- HOOS/KOOS, JR.
- CJR Risk Variables
- SANE
- ASES

**PRO Tracking**
- Collection Interval
- Completion Date

# Data Collection Event Overview

**SUMMARY DATA POINTS**

### A.
**PRE-OPERATIVE**

**PROMs Layout**

- HOOS, JR. / KOOS, JR.
- VR-12 OR PROMIS-10
- CMS CJR Risk Questions
- ASES
- SANE

*See other accepted*

### B
**PROCEDURE**

**Procedure Layout**

- Procedure Information
- Presenting comorbidities
- Present on Admission (Yes/No)

### C.
**RE-ADMISSION**

**Post-Op Comp Layout**

- Presenting complications that result in re-admission within 90 days of the actual procedure date

### D
**POST-OPERATIVE**

**PROMs Layout**

- HOOS, JR. / KOOS, JR.
- VR-12 OR PROMIS-10
- Questions
- ASES
- SANE

*See other accepted*

**Post-Op Comp Layout**

- Presenting complications noted during post-operative follow-ups within 90 days of the actual procedure date (that do not result in re-admission)

# What is a PROM?

- A standardized method to measure symptoms or function
- Patient-Reported Outcome Measures (PROMs) are validated questionnaires
- Symptoms can be tuned into a numerical score.

# Types of PROMs

**Functional (HRQL)**
- Health-Related Quality of Life Measure, HRQL
- Yields a global summary of well-being
- Can be further delineated into domains
- Examples: mental and physical health

**Anatomical (Joint- Specific)**
- May measure a single domain or multiple domains
- These measures were developed for each domain subscale to be reported as an individual score for the PROM
- Examples: functional status, pain, symptoms, or patient experience

# Why Use a Registry for collection of PROM Data?

1. Track full episode of patient care
2. Meet Quality initiatives
3. Federal initiatives
   - MIPS/MACRA
   - Comprehensive Care for Joint Replacement (CJR) model.
4. Collaborate with certifying bodies to meet certification requirements
   - Reports for tracking compliance
5. Completed PROM scores for further analysis
6. Dashboards comparing to National benchmarks

# PROMs for AJRR

## Benchmarked Surveys

- Hoos Jr
- Koos Jr
- Promis10 Global
- VR 12

# PROMs for SER

## Benchmarked Surveys

- ASES
- SANE-Single Assessment Numerical Evaluation (0-100)
- Promis10 Global
- VR 12

# Survey Cadence

1. Benchmarking Interval collection

   - Pre-op collection interval - 90 days to 0 days prior to procedure

   - 1-year post-op collection interval 270 to 365 days after procedure (based on CMS parameters for CJR program)

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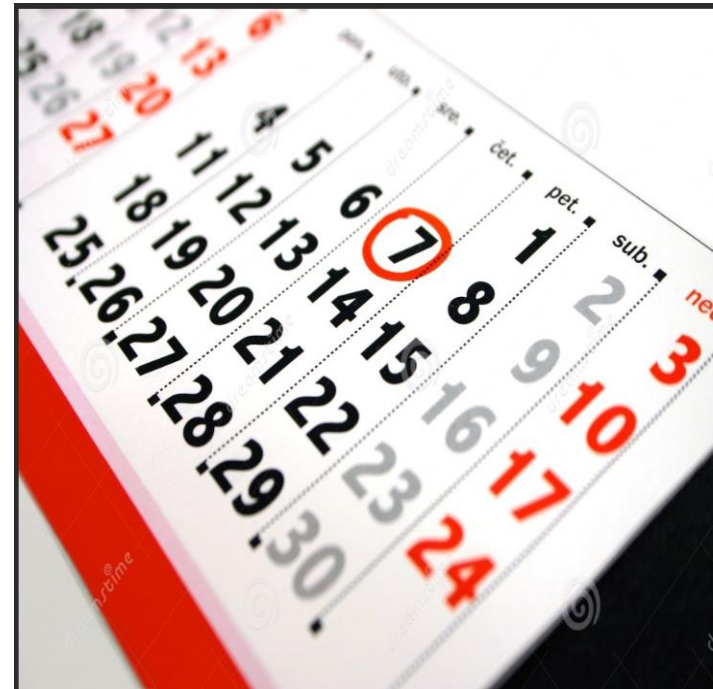
# Collecting and Submitting PROs

## PRO Collection

- *Through your EMR or paper, phone, email*

- Third Party Vendor

- RegistryInsights PRO Administration platform

## PRO Submission

- *Via our file format upload-PROM layout*
- *Manually input data into an excel worksheet*

- Vendor signs AAOS agreement and submits on Participant's behalf, or
- Vendor collects PROs and sends to Participant to submit via a file upload

- Kiosk Mode
- Manual Entry
- Email

# PROM File Layout

| Column Pos. | Column Ltr. | Field Name | Required | Acceptable Data Values and Format | Field Notes |
|---|---|---|---|---|---|
| 166 | FJ | VR_12_Q2 | Conditional | 1-3 (1 = Yes, limited a lot; 2 = Yes, limited a little; 3 = No, not limited at all); not reported or NR | |
| 167 | FK | VR_12_Q3 | Conditional | 1-3 (1 = Yes, limited a lot; 2 = Yes, limited a little; 3 = No, not limited at all); not reported or NR | |
| 168 | FL | VR_12_Q4 | Conditional | 1-5 (1 = No, none of the time; 2 = Yes, a little of the time; 3 = Yes, some of the time; 4 = Yes, most of the time; 5 = Yes, all of the time); not reported or NR | |
| 169 | FM | VR_12_Q5 | Conditional | 1-5 (1 = No, none of the time; 2 = Yes, a little of the time; 3 = Yes, some of the time; 4 = Yes, most of the time; 5 = Yes, all of the time); not reported or NR | |
| 170 | FN | VR_12_Q6 | Conditional | 1-5 (1 = No, none of the time; 2 = Yes, a little of the time; 3 = Yes, some of the time 4 = Yes, most of the time; 5 = Yes, all of the time); not reported or NR | |
| 171 | FO | VR_12_Q7 | Conditional | 1-5 (1 = No, none of the time; ; 2 = Yes, a little of the time;  3 = Yes, some of the time; 4 = Yes, most of the time; 5 = Yes, all of the time); not reported or NR | |
| 172 | FP | VR_12_Q8 | Conditional | 1-5 (1 = Not at all; 2 = A little bit; 3 = Moderately; 4 = Quite a bit; 5 = Extremely); not reported or NR | |
| 173 | FQ | VR_12_Q9 | Conditional | 1-6 (1 = All of the time; 2 = Most of the time; 3 = A good bit of the time; 4 = Some of the time;  5 = A little of the time; 6 = None of the time); not reported or NR | |
| 174 | FR | VR_12_Q10 | Conditional | 1-6 (1 = All of the time; 2 = Most of the time; 3 = A good bit of the time; 4 = Some of the time; 5 = A little of the time; 6 = None of the time); not reported or NR | |
| 175 | FS | VR_12_Q11 | Conditional | 1-6 (1 = All of the time; 2 = Most of the time; 3 = A good bit of the time; 4 = Some of the time;  5 = A little of the time; 6 = None of the time); not reported or NR | |
| 176 | FT | VR_12_Q12 | Conditional | 1-5 (1 = All of the time; 2 = Most of the time;  3 = Some of the time;  4 = A little of the time; 5 = None of the time); not reported or NR | |
| 177 | FU | VR_12_Q13 | Conditional | 1-5  (1 = Much better; 2 = Slightly better; 3 = About the same; 4 = Slightly worse;5 = Much worse); not reported or NR | |
| 178 | FV | VR_12_Q14 | Conditional | 1-5  (1= Much better; 2 = Slightly better; 3 = About the same; 4 = Slightly worse; 5 = Much worse); not reported or NR | |
| 179 | FW | PROMIS_GLOBAL_Q1 | Conditional | 1-5  (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); not reported or NR | Correlates to  survey Q1 in the PROMIS instrument |
| 180 | FX | PROMIS_GLOBAL_Q2 | Conditional | 1-5  (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); not reported or NR | Correlates to survey Q2 in the PROMIS instrument |
| 181 | FY | PROMIS_GLOBAL_Q3 | Conditional | 1-5  (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); not reported or NR | Correlates to survey Q3 in the PROMIS instrument |
| 182 | FZ | PROMIS_GLOBAL_Q4 | Conditional | 1-5  (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); not reported or NR | Correlates to survey Q4 in the PROMIS instrument |
| 183 | GA | PROMIS_GLOBAL_Q5 | Conditional | 1-5  (1 = Poor; 2 = Fair; 3 = Good; 4 = Very good; 5 = Excellent); not reported or NR | Correlates to survey Q5 in the PROMIS instrument |
| | | | | | Correlates to survey Q9 in the PROMIS |

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# PRO Collection

# PRO Submission

- Through your EMR or paper, phone, email

→

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- Manually input data into an excel worksheet

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# Working with a PRO Platform

- A PRO Platform will allow for PROM data capture and deliver a service to both store and facilitate on-demand access to clinical and PROM data,
  - AJRR developed a PROM platform within its RegistryInsights™ system.
  - The platform has many features for clinical staff to:
    - Access their patient data
    - Manage and assign PROM surveys electronically via a secure application.
  - AAOS's secure application also allows patients to access their surveys by means of the Internet at home or in the clinic to complete the surveys in a convenient and timely manner.

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# RegistryInsights™ PRO platform collection and submission:

## Paper-based Survey Administration

- Patient completes paper survey:
    1. Pre or post op office visit
    2. Via mail
    3. Via Phone

- Clinical staff records responses
    1. AJRR Platform, directly storing data into Registry platform
    2. Site EHR system then uploading data into Registry via sFTP
    3. Excel File then uploading data into Registry via sFTP

## Electronic-based Survey Administration

1. Clinic/Hospital Staff pre-register patient on Registry Platform

2. Patient completes electronic survey
    1. Via tablet or computer via the Registry Platform at pre or post op office visit
    2. Survey link email to complete in Registry Platform
    3. Clinic/Hospital calls patient and records responses in registry platform

3. All assessments are stored recorded, uploaded, and viewable in the registry platform

# Roles

- PROM Site Administrator
  - Facilitates distribution and collection of surveys
  - This role allows for the user to create multiple surgeon and clinician users for PROMs collection process.
  - This role will have the ability to manage multiple locations regarding PROM's submission/collection.

- Surgeon/Clinician User
  - Unlimited amount of Surgeon Clinician Users can be created
  - Surgeon Clinician users can assist the Prom site administrator with managing the survey collection and survey upload process

# Thank You

Contact Us:

RegistryEngagement@aaos.org

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