


The logo for the American Academy of Orthopaedic Surgeons (AAOS), featuring the letters 'AAOS' in a serif font with a red circle around the 'O'.

AMERICAN ACADEMY OF  
ORTHOPAEDIC SURGEONS

AMERICAN ASSOCIATION OF  
ORTHOPAEDIC SURGEONS

A large, modern, multi-story building with a glass facade, likely a Stanford University building, under a blue sky with scattered clouds. The building is surrounded by greenery and a road with blurred cars in the foreground.

**Your Academy 2018**  
**California Orthopaedic Association 2018**  
**William J. Maloney MD**  
**Boswell Professor and Chair**  
**Department of Orthopaedic Surgery**  
**Stanford University**

# Disclosures

**AAOS Board of Directors**

**Royalties**

**Zimmer  
Stryker**



## “Form follows Function”

To help you grow professionally and provide the best possible care to your patients, the AAOS is evolving through four strategic initiatives in the coming year:

- Building new, more effective models for Governance and Strategy
- Managing Orthopaedic Tribalism through Partnership
- Enhancing the Value of your Academy Relationship
- Supporting Advocacy through Research & Quality.



# High Level

**Building new, more effective strategic  
plan and governance structure to  
operationalize that plan**

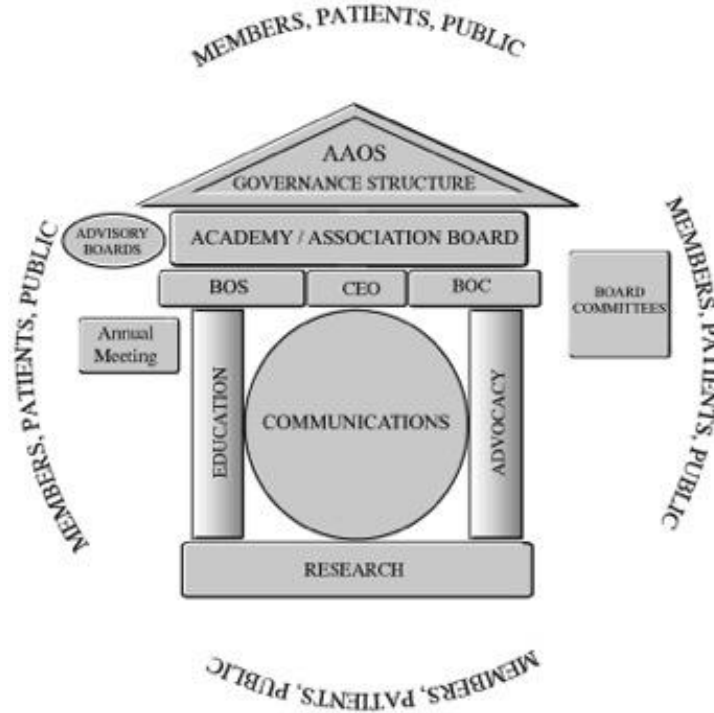


# Shaping the Future – Strategic Planning

Given the pace of change and new Academy leadership, the Board of Directors approved a new Project Team to shape the next Strategic Plan

1. Understand our members needs
2. Focus on our core competencies
3. Strategic partnerships to create new member value & loyalty

# Current Governance Structure





# AAOS

## *Parallel Orthopaedic Organizations*

- American Association of Orthopaedic Surgeons
  - ◆ 501 ( c ) ( 6 ) organization
  - ◆ Maximizes our advocacy efforts
  - ◆ Supports political action
- American Academy of Orthopaedic Surgeons
  - ◆ 501 ( C ) ( 3 )



# High-Performing Governance

1. Comprehensive assessment of AAOS governance as compared to best practices
2. Formulate a set of principles, tailored to the AAOS, that specifies how AAOS Board will be structured and governed
3. Identify any changes to current AAOS governance to align with new set of principles



**Understanding and  
implementing the  
best practices and  
principles of great  
organizational  
governance**





**Managing Orthopaedic Tribalism  
through Partnership**



# Partnership Summit Series


**SUMMIT I 2018 Annual Meeting**

**SUMMIT II 2018 NOLC**

**CREATE A PARTNERSHIP CULTURE that:**

- Promotes alignment, not rivalry
- Defines direction
- Allocates resources & clarifies roles
- Provides mutual benefits and creates shared value
- Holds people and their organizations accountable
- Ensures agility and innovation

**OUTCOME:** AAOS becomes **the trusted “hub” for orthopaedics** through transparent and accountable partnerships that enhance member value

A person wearing a light blue shirt is pointing at an X-ray of a human torso. The X-ray shows the ribcage and spine. The text "Enhancing the Value of Your Academy Relationship" is overlaid in white on a dark blue background. The text is centered and reads: 

**Enhancing the Value of Your Academy Relationship**

# NEW ONLINE LEARNING PLATFORM

[learn.aaos.org](https://learn.aaos.org)

Convenient, comprehensive and engaging content, including:

- All self-assessment examinations
- 60+ surgical techniques microlearning modules
- All AAOS Practice Prep Plans
- Orthopaedic Video Theater

*Free to AAOS members*



LEARNING HAPPENS **HERE**



# Educational Programs

## **NEW** MEMBER BENEFIT ORTHOPAEDIC VIDEO THEATER

- New dynamic interface makes it easier to search, download, bookmark, and rate videos through the AAOS Access app
- 700 videos from top experts worldwide
- 200+ videos now offering CME





# Resident Education

AAOS is committed to helping residents prepare for clinical rotations, Board exams, and practice.

- Orthopaedic Video Theater
- OrthoBullets
- **NEW:** Blueprint for OITE and Part I
- **NEW:** Oncology Review Course
- **NEW:** ResStudy Platform - features a build-a-quiz tool and 3,000+ self-assessment questions from specialty practice exams, OKU, and OITEs



# Educational Programs

Successful partnerships with AOSSM, AAHKS, AAPA, AOFAS, ASES, The Hip Society, The Knee Society, OTA, POSNA, AANA, WOA

**New** Joint Arthroplasty Mountain Meeting (JAMM) presented by The Hip Society, The Knee Society, and AAOS,

**New** AAOS/ABOS/AOA/OREF collaboration to advance the role of simulation in surgical skills training & assessment





# Maintenance of Certification

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‘MOC’



# Maintenance of Certification 2018

I: Professional Standing: Unrestricted License/Privileges

II: Continuing Medical Education: 240 CME/40 SAE

III: Knowledge Assessment: Proctored Examination

IV: Practice Improvement: Peer Review / Case List

*Developed to adhere to ABMS guidelines with input from the ABOS/AAOS Task Force*

# **Summer/Fall 2017: Survey on Maintenance of Certification (MOC) Part III sent to all ABOS Diplomates who had a time-limited Certificate**

**Response Rate: 60% (>10,000 Diplomates)**

**“Of the four MOC Part III Knowledge Assessment options, which one would you prefer to complete when your next Knowledge Assessment is due?”**

<b>Computer-Based Examination</b>	<b>41.2%</b>
<b>Longitudinal Assessment</b>	<b>39.8%</b>
<b>Virtual Practice Assessment</b>	<b>14.2%</b>
<b>Oral Recertification Examination</b>	<b>3.9%</b>

**ABOS Response: Announced launch of Web-Based Longitudinal Assessment (ABOS WLA) at the 2018 AAOS Annual Meeting**



# ABOS Certification Specialists



Last names beginning with **A-B**:

**Denise Frazier**

[dfrazier@abos.org](mailto:dfrazier@abos.org)

Last names beginning with **C-G**:

**Sonya Parker**

[sparker@abos.org](mailto:sparker@abos.org)

Last names beginning with **H-O**:

**Kim Grover**

[kgrover@abos.org](mailto:kgrover@abos.org)

Last names beginning with **P-Z**:

**Morgen Graham**

[mgraham@abos.org](mailto:mgraham@abos.org)



American Board  
of Orthopaedic Surgery

*Establishing Education & Performance  
Standards for Orthopaedic Surgeons*

# American Board of Orthopaedic Surgery: Web-Based Longitudinal Assessment Program

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***ABOS WLA***

A photograph of two surgeons in an operating room. They are wearing blue scrubs, surgical masks, and hairnets. One surgeon is holding a tablet and pointing at the screen, while the other looks on. In the background, other surgical staff are visible, and the room is lit with bright overhead lights. The entire image has a blue color cast.

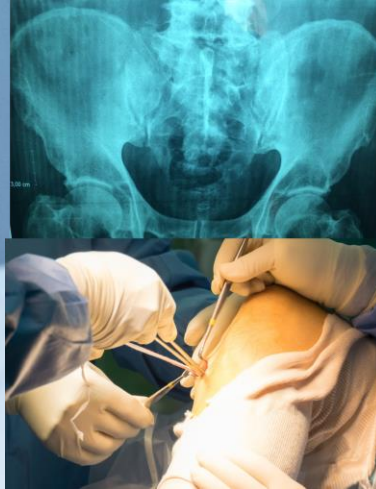
Supporting Advocacy through  
Research & Quality



# On the Forefront of Practice

Effective practice today is driven by a focus on **quality**.

AAOS satisfaction research shows that quality resources focused on evidence-based medicine are the **most important products/services AAOS offers members**.





## Registries

### STRATEGIC PRIORITY

Academy Board approved significant multi-year investment to develop a family of orthopaedic registries

### VALUE TO MEMBERS & PATIENTS

- 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



# About AJRR

- Founded in 2009, originally affiliated with AAOS
- From 1-15 to 10-17 independent organization
- Located in Orthopaedic Headquarters in Rosemont, IL



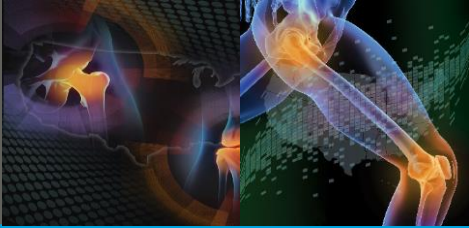
**AJRR**

# About AJRR



**AJRR**

- Longitudinal Registry focused on safety, recalls, and survivorship
- Evolved into a Registry that can assist with quality initiatives
  - Level III – Patient-reported outcomes PRO (2016)
  - Level II – Comorbidities and complications (2017)
- Majority of data come from where procedures are performed (hospitals, surgery centers) – component information
  - However, patient-reported outcomes are often captured in the practice
- AJRR Contracts with facilities
  - Submission of all procedural information on all of their surgeons



# AJRR Data Elements

## LEVEL I

### 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

## LEVEL II

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

## LEVEL III (Patient-reported Outcomes)

### *Recommended:*

- PROMIS-10 Global
- VR-12
- HOOS/KOOS, JR.

### *Also Available:*

- SF-36 v1
- HOOS/KOOS
- Oxford Hip and Knee Scores
- Knee Society Knee Scoring System
- Harris Hip Score
- WOMAC (Modified via HOOS and KOOS)
- SF-12, EQ-5D, WOMAC (only accepting final scores)

# AJRR History & Milestones

- 2010 – started pilot program with 15 hospitals
- 2013 – reached 200 hospitals
- 2014 – received quality clinical data registry (QCDR) designation by CMS
- 2015 – achieved coverage in all 50 states
- 2016 – patient reported outcomes (Level III) launched
- 2017 – officially endorsed by the Ambulatory Surgery Center Association (ASCA) and released LII comorbidities/complications data specs
- 2018 – CMS Medicare claims data incorporation for risk adjustment

The logo for the Ambulatory Joint Registry (AJRR) features the letters 'AJRR' in a bold, grey, sans-serif font. A small red sphere is positioned below the letter 'J'. The logo is set against a yellow rectangular background.The logo for the Ambulatory Surgery Center Association (ASCA). It features the letters 'ASCA' in a large, bold, blue, sans-serif font. Below this, the full name 'Ambulatory Surgery Center Association' is written in a smaller, red, sans-serif font.

# AJRR Stats Today:

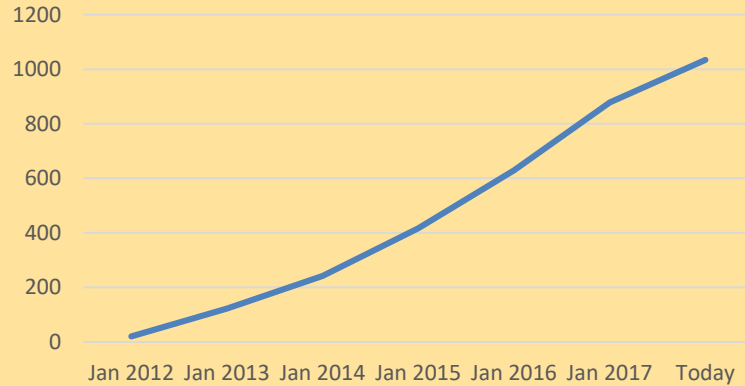
# >1,000,000 PROCEDURES

1,045 participating facilities



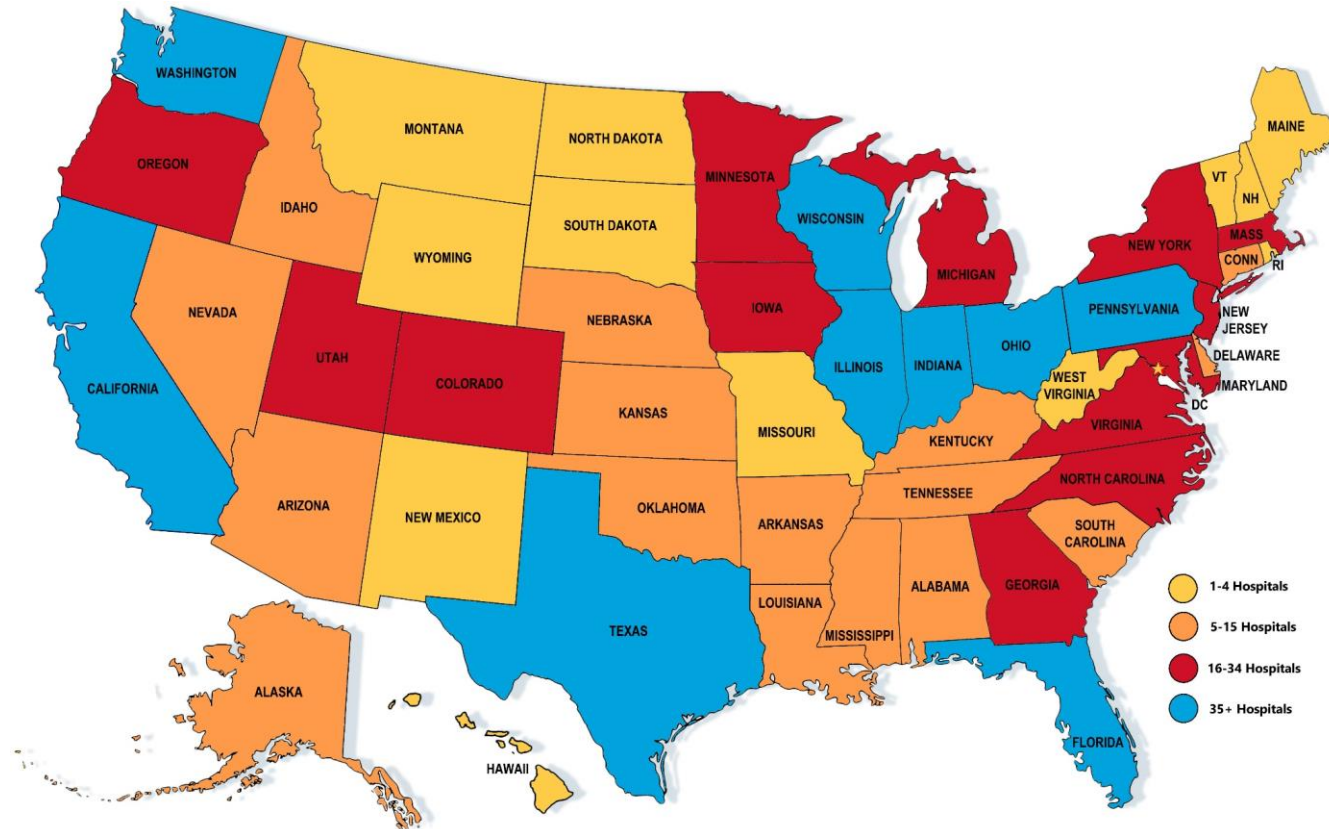
8,900+ surgeons

Participating Facilities  
(Hospitals, ASCs, Practice Groups)

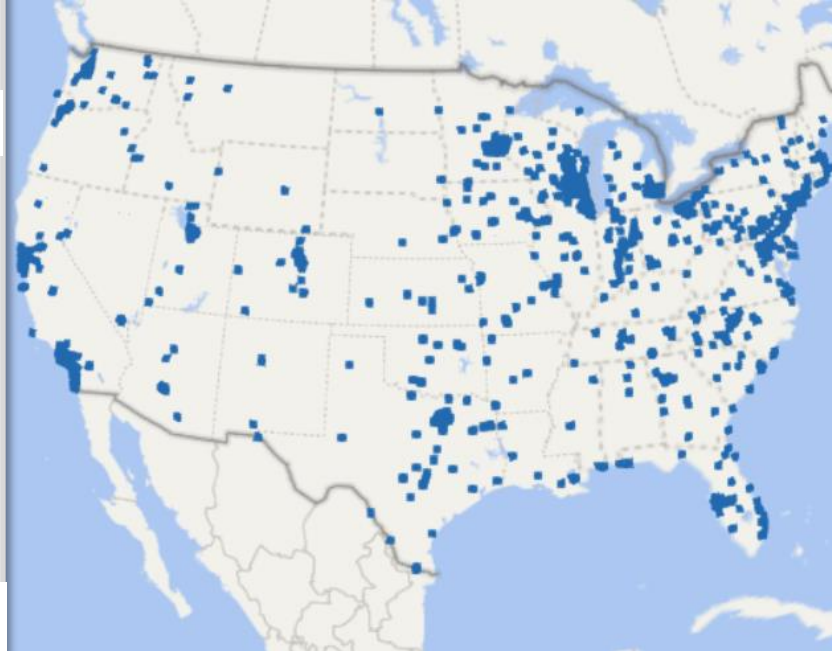




# AJRR Hospital Recruitment: July 2017



# Over 1,000 Current Locations



 **PROVIDENCE**  
Health & Services  
Oregon and Southwest Washington

  
Virginia Mason

 Intermountain<sup>®</sup>  
Musculoskeletal Services

 **Stanford**  
HEALTH CARE  
STANFORD MEDICINE

*White Memorial  
Medical Center*

 **Adventist**  
Health

 **CEDARS-SINAI**

 **CULLMAN REGIONAL  
MEDICAL CENTER**

  
El Paso Specialty Hospital  
*Surgical Care Redefined  
Primarily Physician Owned*

MaineGeneral Health 

 **THE GEORGE WASHINGTON  
UNIVERSITY HOSPITAL**

 **Northwestern**  
Medicine

 **Cleveland  
Clinic**

**HOSPITAL  
FOR  
SPECIAL  
SURGERY**

 **Chippenham Hospital**  
HCA<sup>®</sup>  
AN HCA AFFILIATE / A CAMPUS OF CVM MEDICAL CENTER

**BLUE RIDGE  
SURGERY CENTER**  
an affiliate of **SCA**

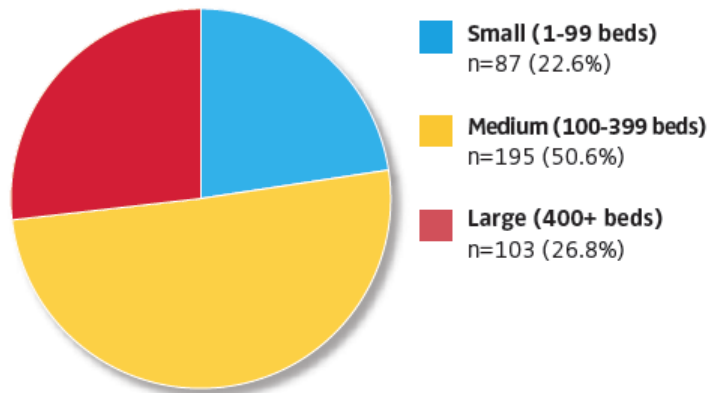
 **NorthShore**  
University HealthSystem  
Orthopaedic Institute

  
The **ORTHOPAEDIC  
INSTITUTE**

  
**HIGH POINT  
SURGERY CENTER**

# Hospital Size of AJRR Submitting Hospitals

**Figure 5: Hospital Size (Bed Count) of Submitting Hospitals (N=385)**



Source: AHA Annual Survey Database Fiscal Year 2013

\* Not all submitting hospitals had relevant data in the AHA survey

# What Can AJRR Data Do Now?

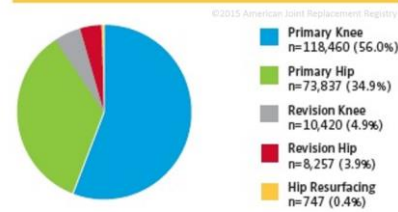
## Detail Surgeon Activities and Case Numbers

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

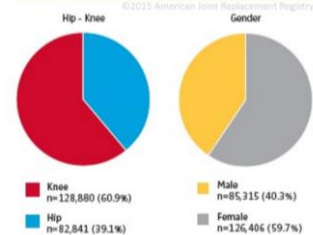
	Total Surgeons	Total Procedures	Per Surgeon Average	Range	Number of Surgeons Who Submitted Only One Procedure
<b>HIP</b>					
Primary	1,822	42,249	23.2	1-317	295
Revision	757	4,624	6.1	1-76	229
<b>KNEE</b>					
Primary	1,617	64,552	39.9	1-522	182
Revision	1,045	6,143	5.9	1-103	308

## Provide Distribution of Procedures

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



## Show Gender Distribution of Procedures



## Characterize US Implant Usage Patterns

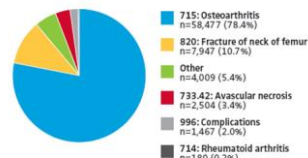
**Table 2: Frequency and Percentage of Femoral Head Sizes Implanted by Year (N=74,833)**

	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

## Show Top Reasons for TJA Procedures

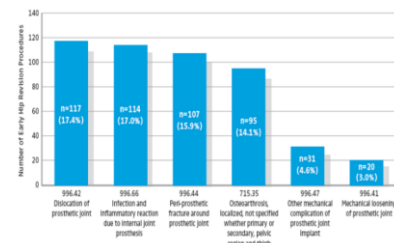
**Figure 14: ICD-9 Diagnosis Codes for All Hip Arthroplasty Procedures (N=74,584)**



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 THA

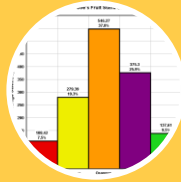
**Figure 27: Most Frequently Reported ICD-9 Diagnosis Codes for Hip Revisions (<3 Months to Revision)**



# Evolving Roles of Registry Data



## Maintenance of Certification



## Quality Reporting MACRA/MIPS



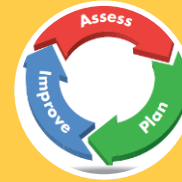
## Device Surveillance

- Pre- and Post-Market Studies
- Component Recalls



## Reimbursement

- CMS
- Health Plans and Insurer Distinction Programs
- ASCs



## Quality Measurement

- Hospital and Physician Level Benchmarking and Public Reporting





# Lessons Learned / Barriers to Overcome

## High cost of data entry, chart abstraction and audits

- ✓ Data entry must be electronic
- ✓ Use data elements from existing clinical documentation when possible
- ✓ Leverage existing HIT systems to reduce data entry and abstraction

## Technical and legal obstacles for participation

- ✓ Need IT buy in – lots of competing projects
- ✓ Surgeon champion extremely helpful
- ✓ A business associate agreement is required for every hospital and ASC – these need to be standardized

## Unclear value proposition

- ✓ Provide pathways to satisfy reporting requirements  
CME, MOC, MACRA/MIPS, post-market surveillance, clinical trials
- ✓ Enhance quality assurance by regional and national benchmarking
- ✓ Provide centralized, scalable suite of registries to reduce costs and burden of participation

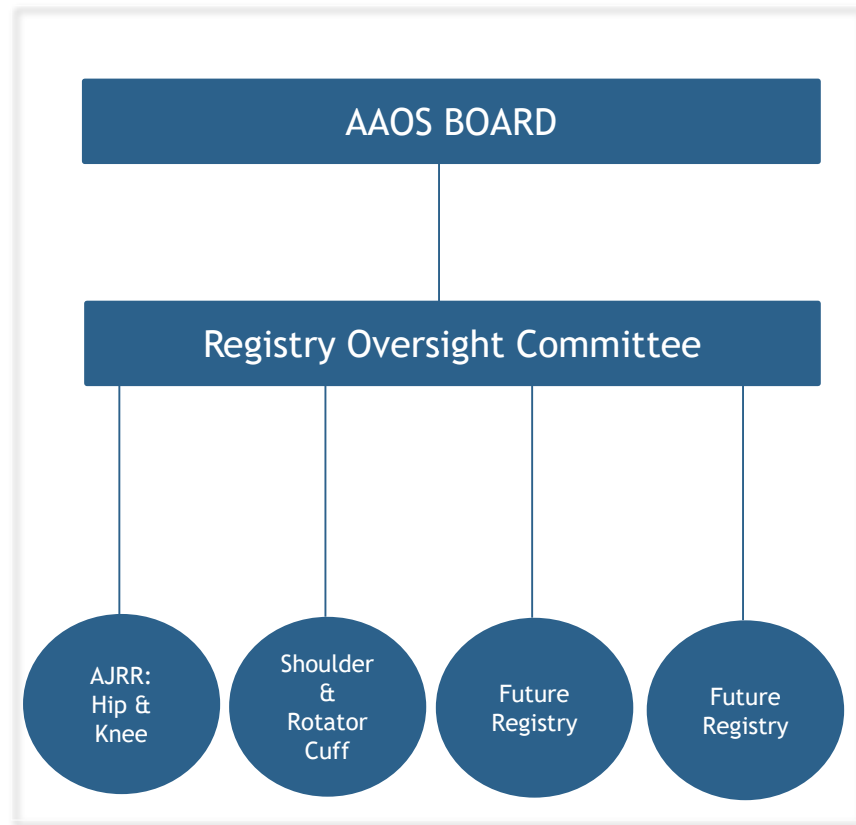




# AAOS Future Registry Plans

## Moving Forward

- ✓ 2017 – strategic decision to develop a family of orthopaedic registries
- ✓ Established the Registry Oversight Committee that reports to the Board of Directors
  - Chaired by Dan Berry
  - Charged with developing priorities for registry development
  - Shoulder and Elbow next registry
    - Both total shoulder replacement and rotator cuff repair are in Medicare's top ten
    - Shoulder and Elbow committee established and will meet at the AAOS meeting in New Orleans
- ✓ Envision registry presence in all nine orthopaedic specialties
- ✓ ? Biologics



# Quality Resources

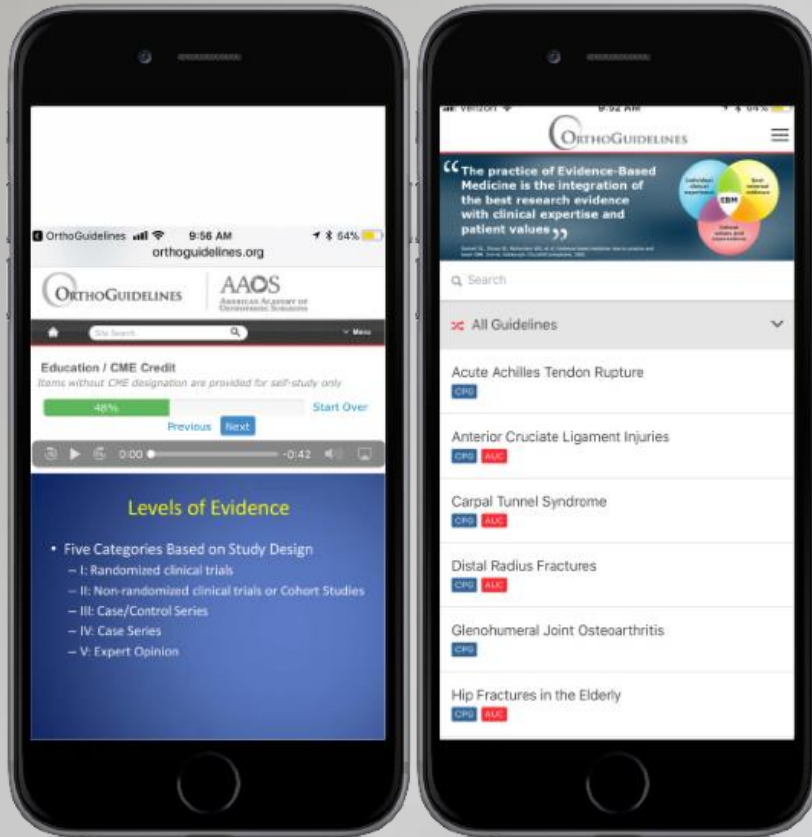
## CLINICAL PRACTICE GUIDELINES AND AUCS

OrthoGuidelines app developed for timely access

- 18 clinical practice guidelines
- 14 appropriate use criteria

**NEW** - Management of Osteoarthritis of the Hip CPG & AUC

Awarded \$1.5 million by the Department of Defense to develop 6 new guidelines and 6 new AUCs





# Resident Assembly

Allows residents and residency programs to identify important issues and bring advisory opinions to the AAOS Board

- 152 delegates representing 70% of all U.S. and Canadian programs
- Five webinars for residents garnered 136 live attendees and 434 replays on demand



# Physician Assistant & DO Membership

- New membership category for Physician Assistants
- Reviewing pathway for DO members to become full Fellows of the AAOS



# International Engagement

- Currently there are 4,222 AAOS international members from 119 countries
- 25 AAOS Fellows will serve as faculty in 10 international education programs in 7 countries in 2018
- The first AAOS Regional Meeting will be held in Dubai in 2019





# Advocacy is Important

*"If you're not at the table,  
you're on the menu."*

-Senator Michael Enzi





# Advocacy

## COLLABORATIVE APPROACH

AAOS achieves advocacy success by working collaboratively on leadership and outreach levels



POLITICAL ACTION COMMITTEE OF  
THE AMERICAN ASSOCIATION OF ORTHOPAEDIC SURGEONS



# Advocacy work ...

## “NATIONAL WINS”

- Passed IPAB repeal
- Accomplished significant **downsizing of mandatory CJR areas and cancellation of SHFFT bundled payment model**
- Passed legislation to **protect sports medicine professionals** through the U.S. House of Representatives
- Passed legislation to **reform unfair antitrust laws** and ensure insurance company competition
- Attained **increased protection for small, solo, and rural practices** under the Quality Payment Program



- Submitted comments that resulted in the **withdrawal of a harmful proposed rule** on orthotics/prosthetics
- Received **unprecedented access/representation** at over 600 political events via Orthopaedic PAC
- Obtained **CMS code change** for total ankle

# Advocacy works ...

## STATE WINS

**South Carolina** Supreme Court agreed with two orthopaedic surgeons in their long fight protecting the integration of physical therapy and physician services.

**Maryland** Orthopaedic Association successfully advocated for an exemption from prohibition against self-referral as long as that compensation was from an advanced payment model.

In **Nevada, Georgia, Tennessee, and Maine**, governors signed laws allowing **visiting sports team physicians to practice in a state** where they are not licensed as long as they are licensed in another state.



**Pennsylvania** Orthopaedic Society successfully advocated for a state bill that ends harmful healthcare insurer practice of **clawing back paid claims**.





# Advocacy

## 2018 PRIORITIES - DRIVEN BY THE AAOS UNIFIED ADVOCACY AGENDA

- Ensuring orthopaedic priorities in the implementation of MACRA's Quality Payment Program
- IPO List changes TKA --> THA → TSA --> Spine
- Supporting medical liability and antitrust reform
- Preserving in-office ancillary services, physician owned hospitals, and other ownership issues
- Securing appropriations for orthopaedic research
- Championing orthopaedic concerns related to payment reform

# Your Role ...

**Engage:** Ask questions, reach out to your State and Regional Orthopaedic Society

Explore our growing offering of free educational content for members at [learn.aaos.org](https://learn.aaos.org)

Support

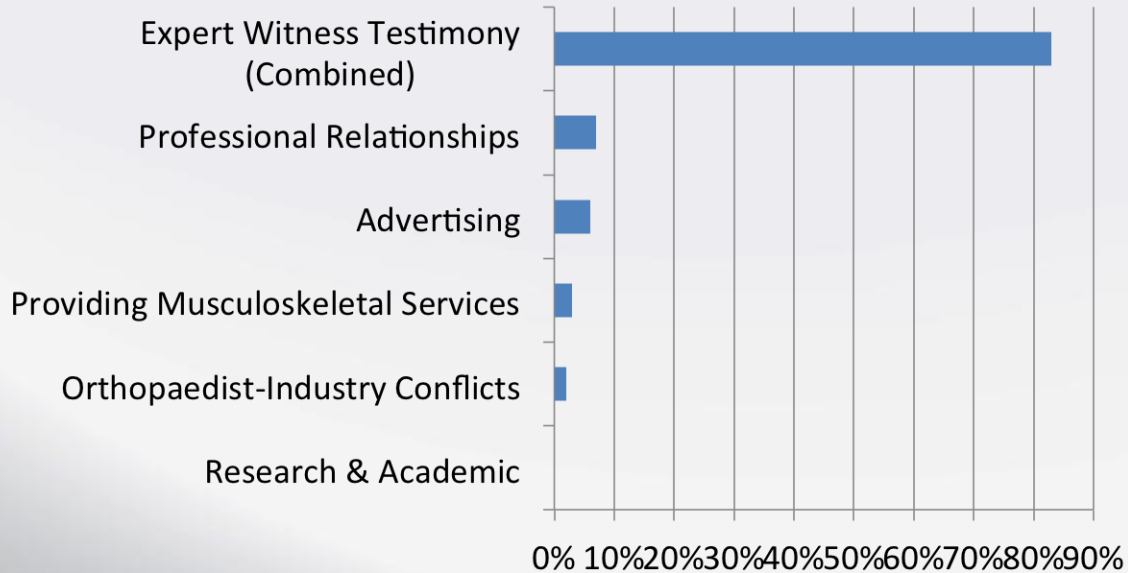


**Help make the AAOS, your Academy ...**



# Standards of Professionalism (SOPs)

## *Percentage of Grievances Filed by SOPs*



# Professional Compliance Program Grievance Statistics 2005 - 2014

Total Grievances Submitted – 172

Grievances Dismissed (no prima facie) – 40

Grievances dropped/failed Admin Review – 58

Total Hearings:











Committee on Professionalism – 64

Judiciary Committee – 22

Board of Directors - 37

# Professional Compliance Program

AAOS Professional Compliance Program  
Grievance Actions

	Sanction	Forms of Publication			
		Letter to Opposing Party	AAOS Now	Medical board, ABOS, state orthopaedic societies	NPDB (patient care only) Total 22 to date
<b>UNOFFICIAL ACTION</b>	Letter of Concern (sent to either party)	 Notice without details			
<b>OFFICIAL ACTION</b>	Reprimand	 Notice with details			
	Censure				
	Suspension				
	Expulsion				



# Professional Compliance Program

## Board Compliance Actions

➤ Letter of Concern - 4

(unofficial action that can be sent to Grievant or Respondent)

➤ Censure - 12

➤ Suspension - 24

➤ Expulsion - 1

TOTAL BOARD ACTIONS - 41

Less than 25% of grievances submitted to date have resulted in compliance action (official and unofficial) by the Board of Directors.

# Considerable Litigation

**10** Legal cases so far --

Total Legal Expenses Paid by Insurance  
and AAOS through April 28, 2014:

**\$6,041,851** (estimated figure)

Total AAOS Out of Pocket Legal Expenses  
Paid by AAOS through April 28, 2014:

**\$2,064,460**



