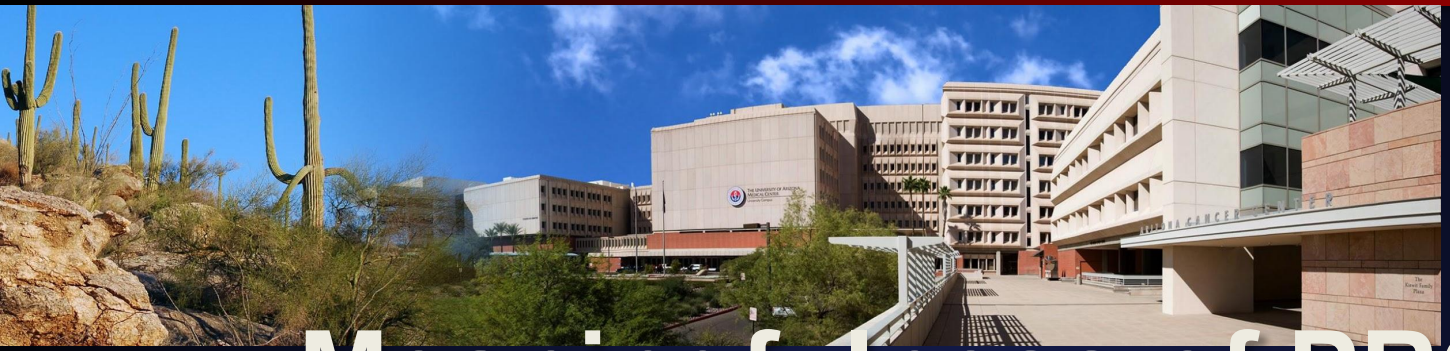


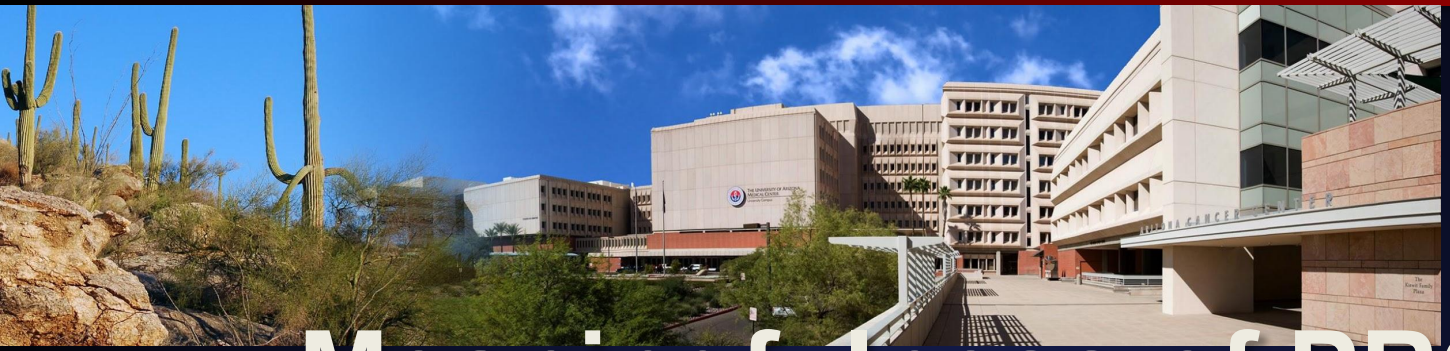
Meaningfulness of PROs: Clinician and Patient Perspectives

2020 DO-Touch.NET Annual Meeting and Educational Seminar - March 10 and 11, 2020

Michael Dohm, MD

Brian F. Degenhardt, DO, C-NMM/OMM

THE UNIVERSITY OF ARIZONA | COLLEGE OF MEDICINE



Meaningfulness of PROs: Clinician and Patient Perspectives

And how they relate to Quality Improvement and Value-Based Payment Reform

THE UNIVERSITY OF ARIZONA
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Disclosure Information

DO-Touch.NET Annual Meeting and Educational Seminar

Measuring the Impacts of OMM:

Patient-reported Outcomes in the Clinical Setting

Michael Dohm, MD, and Brian F. Degenhardt, DO

- We have no financial relationships to disclose.
- We will not discuss off-label use or investigational use in our

Learning Objectives

After attending, participants should be able to:

1. discuss the utility of patient-reported outcome measures in clinical practice,
2. explain how patient-reported outcomes can be used to improve health, and
3. outline methods for discussing patient-reported outcomes with patients.

MACRA

Medicare Access and CHIP Reauthorization Act of 2015

MIPS

Merit-Based Incentive Payment System

CJR

Comprehensive Care for Joint Replacement Model

APM

AAOS
American Association of Orthopaedic Surgeons

Advocacy Now

FEATURING PUBLIC RELATIONS
Bonefied News

Janiuary 23, 2018

BACK TO HOME

IN THIS ISSUE

CMS Announces BPCI Advanced Model

On January 9, the Centers for Medicare and Medicaid Services (CMS) announced a new voluntary bundled payment model that will qualify as an Advanced Alternative Payment Model (Advanced APM) under the Quality Payment Program. This new model, called "Bundled Payments for Care Improvement Advanced" (BPCI Advanced), requires participants to bear financial risk, have payments under the model tied to quality performance, and use Certified Electronic Health Record Technology. By meeting these requirements, participants can earn the Advanced APM incentive payment.

Medicare Access and Childrens' Health Insurance Program Reauthorization Act of 2015 (MACRA)

Quality Payment Program:

1) Advanced Alternative Payment Models (APMs)
2) Merit-Based Incentive Payment System (MIPs)

January 9, 2018 CMS: Voluntary Bundled Payment Model qualifies as Advanced Alternative Payment Model

- Bundled Payments for Care Improvement Advanced (BPCI Advanced)
- Bear financial risk
- Payments tied to quality performance
- Use of certified electronic health record technology

33 different Clinical episodes: October 1, 2018-December 31, 2023

- Back and neck except spinal fusion
- Spinal fusion non-cervical
- AP spinal fusion
- Cervical spinal fusion
- Cellulitis
- Double joint replacement lower extremity
- Fractures femur/hip/pelvis
- Hip and femur except major joint
- Lower extremity/humerus procedure except hip/foot/femur
- Major joint replacement lower
- Major joint replacement upper

Programs are no longer voluntary, no longer offer incentives, and may place more than 10% Medicare payment at risk

- MIPS replacement end 2018
- 2019 bonuses or penalties based on composite score
- -9% penalty to 20% bonus
- Budget Neutral
- Qualified Clinical Data Registry (QCDR)
- Risk-adjusted, episode-based cost measures
- Standards of care by Quality Improvement Organizations not used in medical liability

Disclosure:

HEROES AND MARTYRS OF QUALITY AND SAFETY

Ernest Amory Codman MD

D Neuhauser

Qual Saf Health Care 2002;**11**:104–105

Ernest Amory Codman MD (1869–1940) was a Boston surgeon. Like all of us he was human and made mistakes. Unlike others he made a lifelong systematic effort to follow up each of his patients years after treatment and recorded the end results of their care. He recorded diagnostic and treatment errors and linked these errors to outcome in order to make improvements. He was sufficiently disgusted with the lack of such outcomes evaluation of care at the Massachusetts General Hospital where he was on the staff that he resigned to start his own private hospital which he called the "End Result Hospital".

From 1911 to 1916 there were 337 patients discharged from Codman's hospital. He recorded 123 errors and measured the end results for all these patients. He grouped errors by type. There were errors due to lack of knowledge or skill, surgical judgment, lack of care or equipment, and lack of diagnostic skill. In addition to the errors there were four "calamities of surgery or those accidents and complications over which we have no known control. These should be acknowledged to our selves and to the public and study directed to their prevention".

Next read Codman's autobiography in *The Shoulder* (privately printed, Boston, 1934 and reprinted since then). Here he reproduces his cartoon and graphs his life on one page including his yearly income. Such public disclosure of personal income is not something a proper Bostonian would do. On this

What is Value-Based Care?

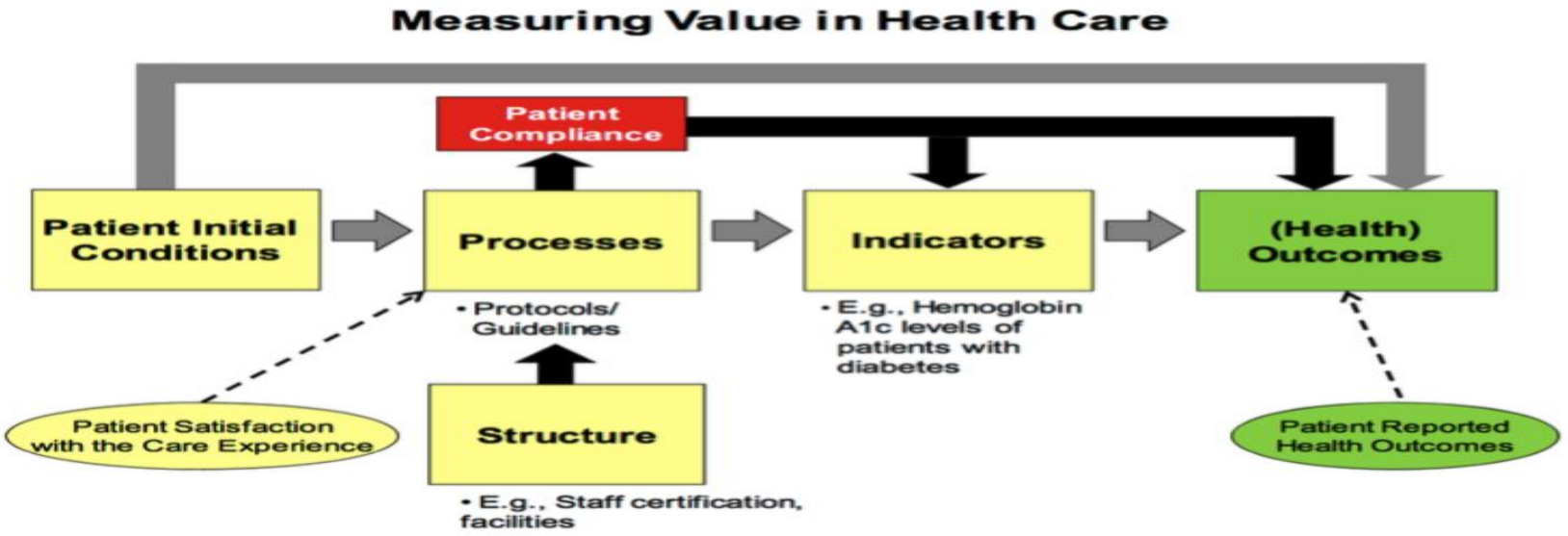
- Health Care based on value not volume
- The Value equation: quality over cost over time
- “Safe, appropriate, effective care with enduring results at reasonable costs for patients and providers employing evidence-based medicine and proven treatments and techniques considering patients’ wishes and preferences” Dartmouth-Hitchcock
- A critical component of understanding value is measurement, without data patients lack the tools to make informed choices

Value Today:

The Healthcare Value Equation

$$\text{Value} = \frac{\text{Quality}}{\text{Cost}}$$

Value in Health Care:



- Supplement to: Porter ME. What is value in health care? N Engl J Med 2010;363:2477-81. DOI: 10.1056/NEJMp1011024.

Value in Health Care:

Figure 1. The Outcome Measures Hierarchy.

- Supplement to: Porter ME. What is value in health care? N Engl J Med 2010;363:2477-81. DOI: 10.1056/NEJMp1011024.

Outline:

- **Outcomes**: Implementation of ***data infrastructure***, ***quality and performance measurement tools***
  -patient reported outcome measures ***(PROMs)***
  -functional outcome measures ***(FOMs)***

- **Evidence**: over 80 active projects, local/regional/national/international network

Collaboration:

- **Orthopaedic Faculty and Staff** at University of Arizona
- **Center on Aging/ Geriatricians**
- Bioengineers
- **Arthritis Center**/Rheumatology
- **College of Medicine**: Biostats/Grant Writing/Financial
- **College of Public Health**: epidemiology/ biostats/grant writing
- **Students** (medical/ udergraduates)
- **Residents** (PGY 1 through 5)

Orthopaedic Outcomes:

- **HEALTH** RCT
- Fragility Fracture Service Clinic Rheum/Geri
- Joint Arthroplasty Projects with AJRR/AAOS/AAHKS and OMERACT (Cochrane MSK)/ISAR
- **Hip and Knee** OA **Patient Reported Outcome Measures (PROMs)** and **Functional Outcome Measures (FOMs)**
- **Spine PROMs** and **FOMs** with Center on Aging, Bioengineers, Physiology Students, Medical Students

AAOS
AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

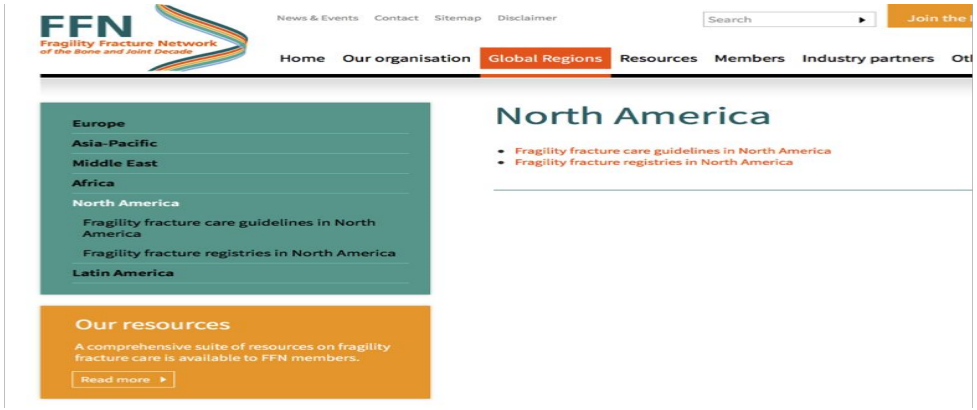
MANAGEMENT OF HIP FRACTURES IN THE ELDERLY

EVIDENCE- BASED CLINICAL PRACTICE GUIDELINE

Adopted by the American Academy of Orthopaedic Surgeons Board of Directors
September 5, 2014

This Guideline has been endorsed by the following organizations:

OTA
ORTHOPAEDIC TRAUMA ASSOCIATION
THE HIP SOCIETY FOUNDED IN 1969
AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AACE
Bone and Joint Initiative USA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Latin America
Our resources
A comprehensive suite of resources on fragility fracture care is available to FFN members.
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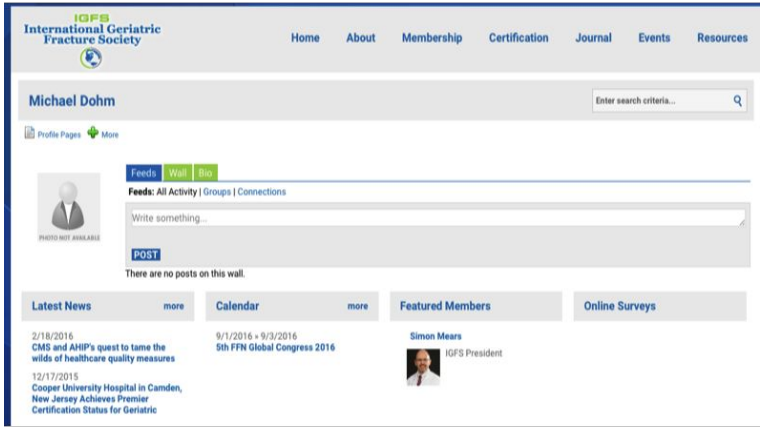
Fragility fracture registries in North America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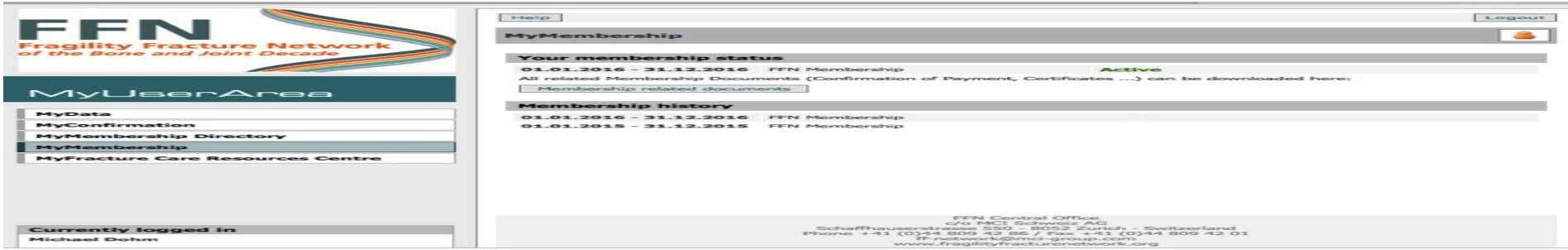
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of the Bone and Joint Decade
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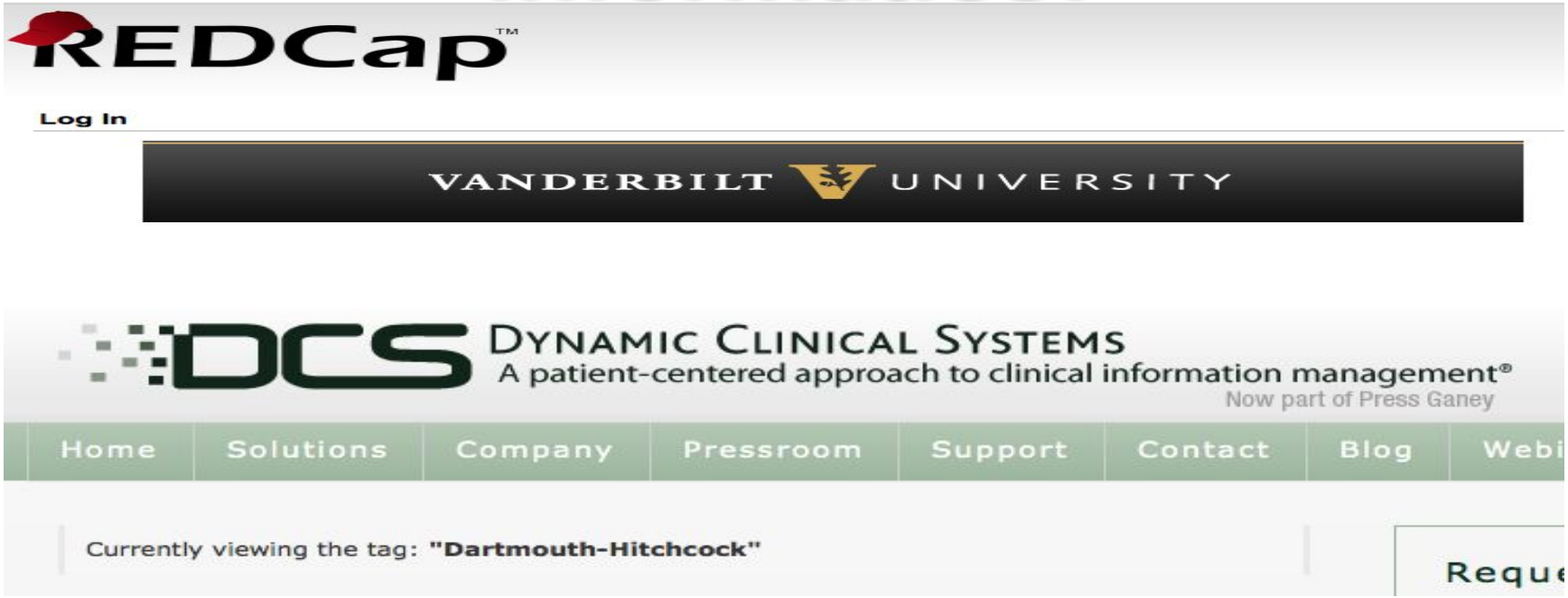
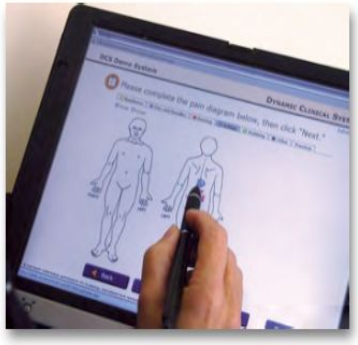
MyData
MyConfirmation
MyMembership Directory
MyMembership
MyFracture Care Resources Centre
Currently logged in
Michael Dohm
Help
Logout
MyMembership
Your membership status
01.01.2016 – 31.12.2016 FFN Membership Active
All related Membership Documents (Confirmation of Payment, Certificates ...) can be downloaded here:
Membership related documents
Membership history
01.01.2016 – 31.12.2016 FFN Membership
01.01.2015 – 31.12.2015 FFN Membership
FFN Central Office
c/o MCI Schweiz AG
Schaffhauserstrasse 550 · 8052 Zurich · Switzerland
Phone +41 (0)44 809 42 86 / Fax +41 (0)44 809 42 01
ff-network@mci-group.com
www.fragilityfracturenetwork.org

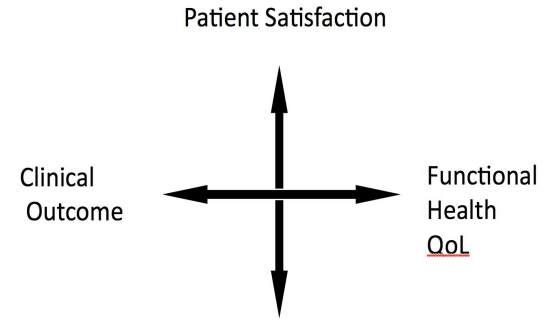
Informatics:



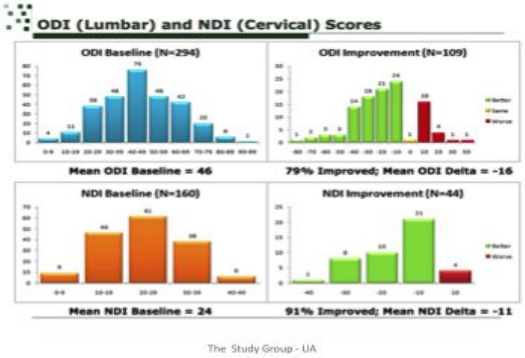


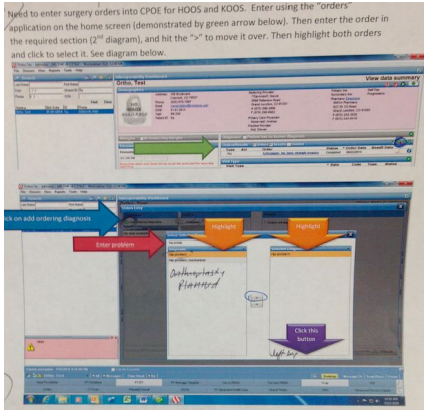
Patient Completing the Health Survey

The Clinical Value Compass

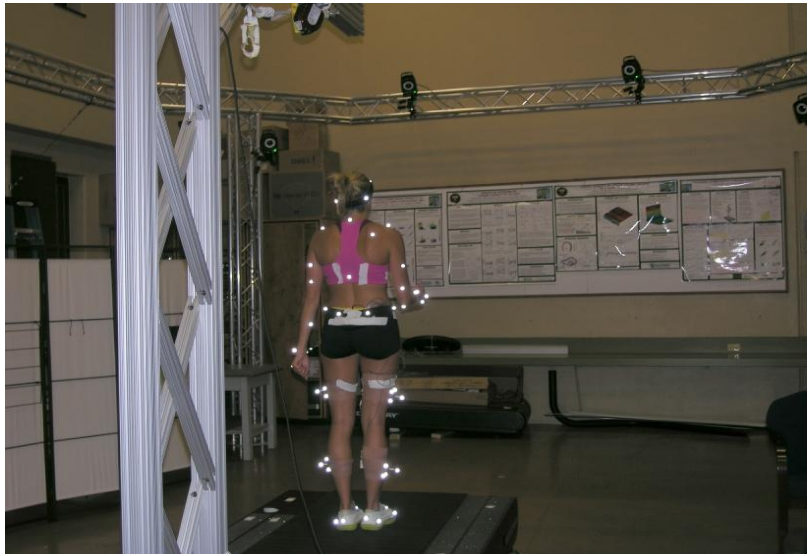


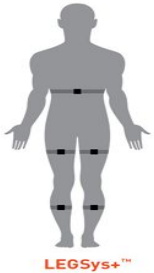
Batalden and Nelson, Dartmouth Medical School.

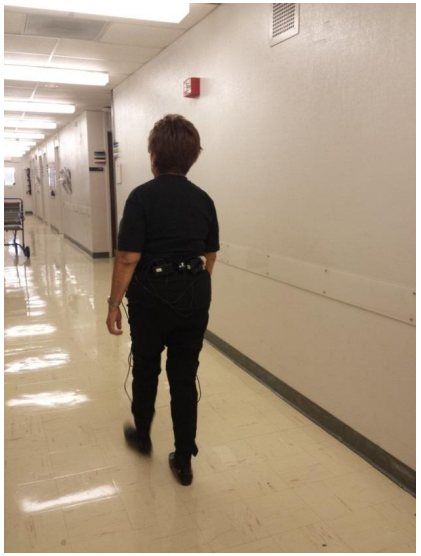




Wearable Sensor Technology



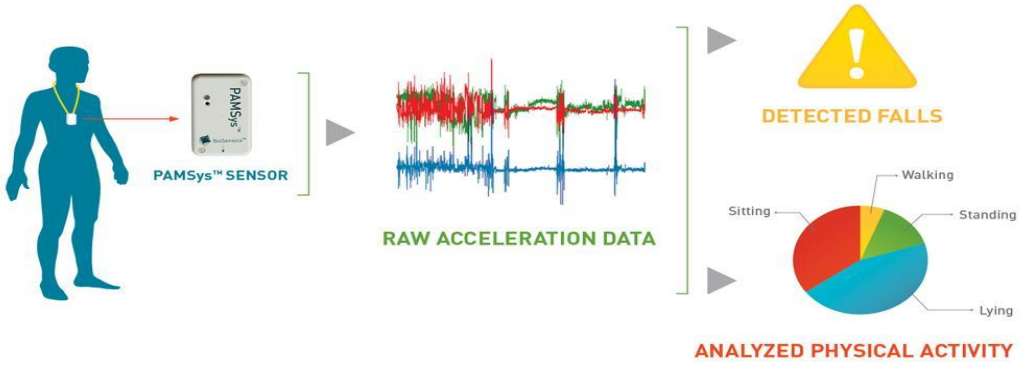




Measurement

Measurements:

- Balance
  - Eyes Open (x2)
  - Eyes Closed (x2)
  - Eyes Open Dual Task (x2)
- Gait
  - Normal
  - Normal Dual Task
  - Fast
  - Fast Dual Task
- Physical Activity (PAMSys)



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Improving Orthopaedic Care Through Data

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1,137,003 and counting...

1,021
Hospitals Participating

See All AJRR Locations

8,960
Surgeons

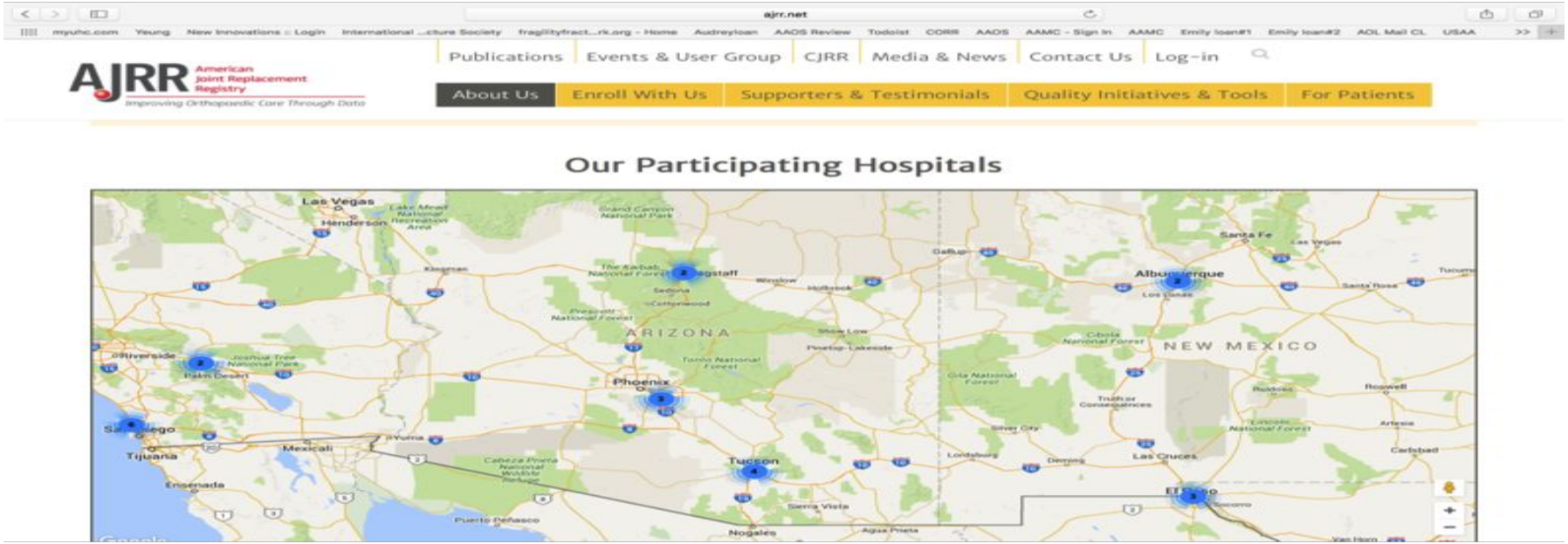
50
States Represented

UPMC LIFE CHANGING MEDICINE

UPMC Altoona
Altoona, PA

Participant Since 2016

NOVANT HEALTH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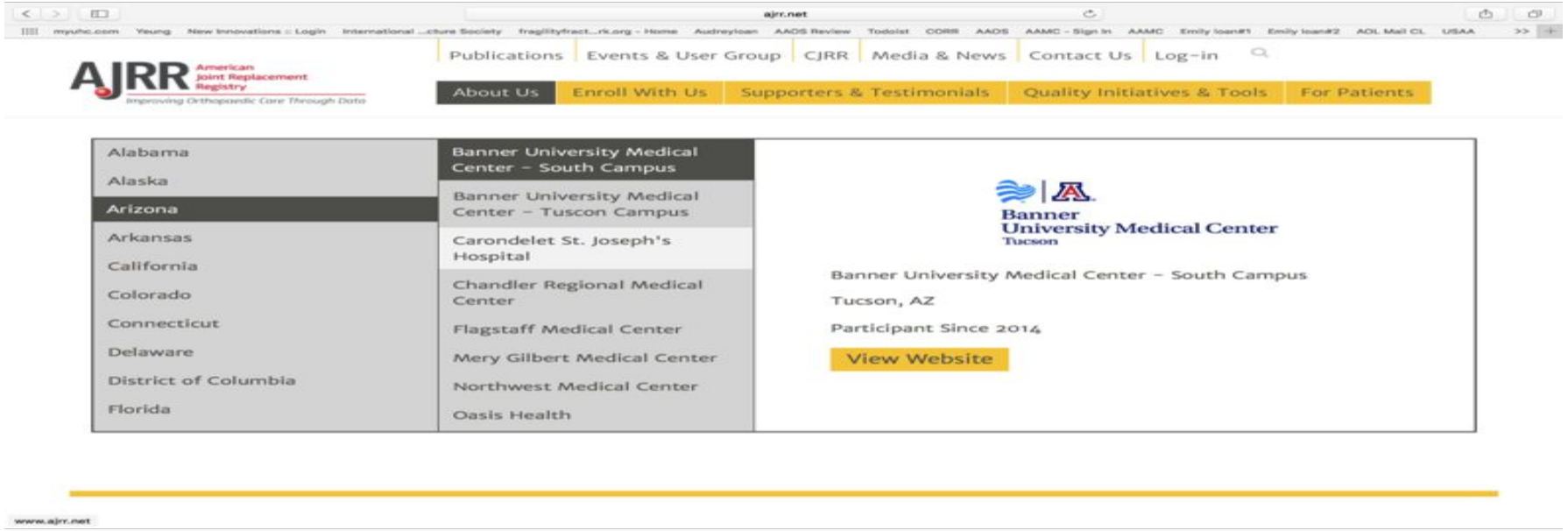
Las Cruces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Flagstaff Medical Center
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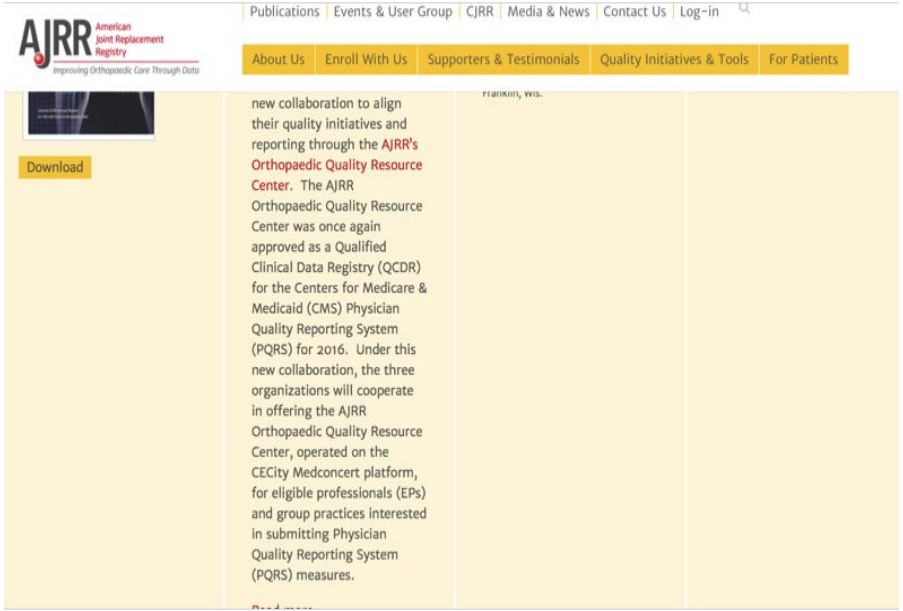

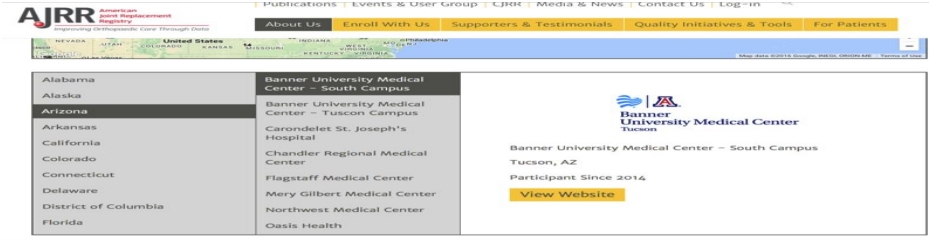

Qualified Clinical Data Registry Reporting

The qualified clinical data registry (QCDR) reporting mechanism was introduced for the Physician Quality Reporting System (PQRS) beginning in 2014. A QCDR will complete the collection and submission of PQRS quality measures data on behalf of individual eligible professionals (EPs). For 2015, a QCDR is a CMS-approved entity that collects medical and/or clinical data for the purpose of patient and disease tracking to foster improvement in the quality of care provided to patients. Individual EPs who satisfactorily participate in 2015 PQRS through a QCDR may avoid the 2017 negative payment adjustment (-2.0%). To be considered a QCDR for purposes of PQRS, an entity must self-nominate and successfully complete a qualification process.

Search this site

ISAR

International Society of Arthroplasty Registers

The Study Group - University of Arizona

Type: **Hip, Knee and other** -- Status: **Associate**

The Study Group - UA
Department of Orthopaedic Surgery
The Arthritis Center
PO Box 245093
College of Medicine
University of Arizona
Tucson, AZ 85724, USA
http://ortho.arizona.edu

Director: Michael Dohm
Director of Clinical Research: Cynthia Fastje

Clinical Value Compass
THA surgery in Sweden

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ACS NSQIP Hip Fracture Pilot

Project Update

- Joint effort between ACS and AAOS
- Pilot began on January 01, 2015
- Pilot final operation date June 30, 2015
- Variables collected through Hip Fracture "custom group" on ACS NSQIP Workstation
- Regular calls between participating sites, ACS Clinical Support, and AAOS

Review of Pilot Data

As of July 13, 2015

- 45 participating sites
- 1181 completed cases
  - Lowest number of cases per site: 1
  - Highest number of cases per site: 99
- Very low percentage of "missing" pilot data

Clin Orthop Relat Res. 2015 May; 473(5): 1574–1581. PMCID: PMC4385340
Published online 2014 Apr 5. doi: 10.1007/s11999-014-3597-7

Use of the National Surgical Quality Improvement Program in Orthopaedic Surgery

Cesar S. Molina, MD, Rachel V. Thakore, BS, Alexandra Blumer, BS, William T. Obremskey, MD, MPH, MMHC, and Manish K. Sethi, MD

The Vanderbilt Orthopaedic Institute Center for Health Policy, Medical Center East, 1215 21st Avenue South, Suite 4200, South Tower, Nashville, TN 37232 USA

Manish K. Sethi, Email: , manish.sethi@vanderbilt.eduEmail: cesar.molina@vanderbilt.edu.

Corresponding author.

Results

Of the 1,979,084 surgical patients identified in the database, 146,774 underwent orthopaedic procedures (7%). Of the 30 most common orthopaedic procedures, the top three were TKA, THA, and knee arthroscopy with meniscectomy, which together comprised 55% of patients (55,575 of 101,862). We identified 5368 complications within the top 30 orthopaedic procedures, representing a 5% complication rate. The minor and major complication rates were 3.1% (n = 3174) and 2.8% (n = 2880), respectively. The most common minor complication identified was urinary tract infection (n = 1534) and the most common major complication identified was death (n = 850). An American Society of Anesthesiologists class of 3 or higher was a consistent risk factor for all three categories of complications in patients undergoing hip fracture repair.

Conclusions

The ACS NSQIP database allows for evaluating current trends of adverse events in selected surgical specialties. However, variables specific to orthopaedic surgery, such as open versus closed injury, are needed to improve the quality of the results.

Action Plan:

- **Determine *Outcomes*** through Implementation of the ***data infrastructure***, utilization and development of ***quality and performance measurement tools***
  - follow patient reported outcome measures ***(PROMs)***
  - collect functional outcome measures ***(FOMs)***

- **Participate in production and evaluation of the *Evidence***: complete over 80 active projects, nurture and further develop local/regional/national/international networks

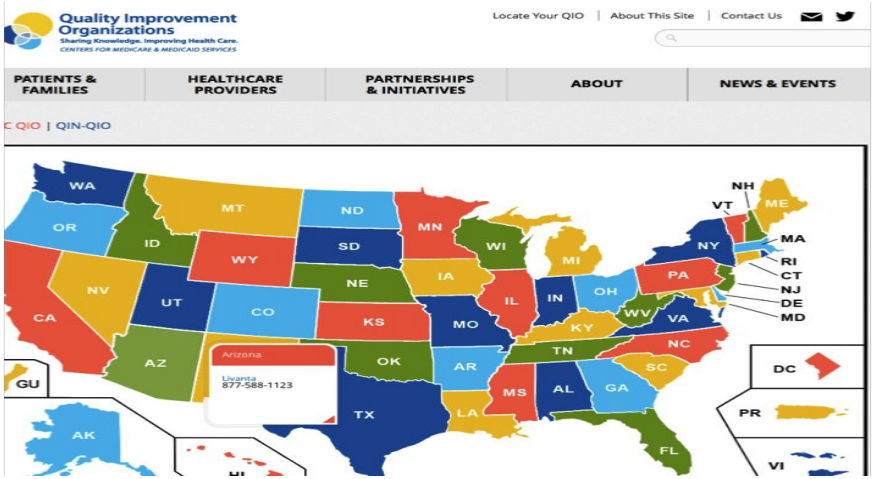
- **Discover *Value*** through Collaboration, improve quality, establish direction in pursuit of best practice

Action Plan:

- Work on Cultural change
- Establish an office for Value-Based Care
- Clinicians/IT/admin
- Meet monthly
- Transparent and Generalizable
- Establish study groups/ oversight committee
- Operationalize quidelines/ imbed outcome measures
- Tie in cost/charge/efficiency/effectiveness

Health & Science

Medicare Penalizes Group Of 751 Hospitals For Patient Injuries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Comprehensive Care for Joint Replacement Model
Share
The Comprehensive Care for Joint Replacement (CJR) model aims to support better and more efficient care for beneficiaries undergoing the most common inpatient surgeries for Medicare beneficiaries: hip and knee replacements (also called lower extremity joint replacements or LEJR). This model tests bundled payment and quality measurement for an episode of care associated with hip and knee replacements to encourage hospitals, physicians, and post-acute care providers to work together to improve the quality and coordination of care from the initial hospitalization through recovery.
The proposed rule for the CJR model was published on July 9, 2015, with the comment period ending September 8, 2015. After reviewing nearly 400 comments from the public on the proposed rule, several major changes were made from the proposed rule, including changing the model start date to April 1, 2016. The final rule was placed on display on November 16, 2015 and can be viewed at the Federal Register.
Background
Hip and knee replacements are the most common inpatient surgery for Medicare beneficiaries and can require lengthy recovery and rehabilitation periods. In 2014, there were more than 400,000 procedures, costing more than $7 billion for the hospitalizations alone. Despite the high volume of these surgeries, quality and costs of care for these hip and knee replacement surgeries still vary greatly among providers.
For instance, the rate of complications like infections or implant failures after surgery can be more than three times higher at some facilities than others, increasing the chances that the patient may be readmitted to the hospital. And, the average Medicare expenditure for surgery, hospitalization, and recovery ranges from $16,500 to $33,000 across geographic areas.
Model Summary
Stage: Announced
Number of Participants: 67 MSAs
Category: Episode-based Payment Initiatives
Authority: Section 3021 of the Affordable Care Act
Milestones & Updates
May 06, 2016
Announced: PBPM exclusions posted
Mar 31, 2016
Updated: Spanish language beneficiary notification letters posted
Feb 24, 2016
Updated: Hospital list posted
Feb 10, 2016
Updated: Hospital list posted

CJR MSA Hospitals:

Acute care hospitals, identified by CMS Certification Number (CCN), located in the MSAs selected to participate in the Comprehensive Care for Joint Replacement model

MSA	MSA Name	Hospital Name	CCN
31080	Los Angeles-Long Beach-Anaheim, CA	Hoag Orthopedic Institute	050769
31080	Los Angeles-Long Beach-Anaheim, CA	Coast Plaza Hospital	050771
41860	San Francisco-Oakland-Hayward, CA	San Leandro Hospital	050773
31080	Los Angeles-Long Beach-Anaheim, CA	College Medical Center	050776
41860	San Francisco-Oakland-Hayward, CA	Kaiser Foundation Hospital-San Leandro	050777
31080	Los Angeles-Long Beach-Anaheim, CA	Martin Luther King, Jr. Community Hospital	050779
31080	Los Angeles-Long Beach-Anaheim, CA	Foothill Regional Medical Center	050780
14500	Boulder, CO	Longmont United Hospital	060003
19740	Denver-Aurora-Lakewood, CO	Platte Valley Medical Center	060004
19740	Denver-Aurora-Lakewood, CO	Lutheran Medical Center	060009
19740	Denver-Aurora-Lakewood, CO	Denver Health Medical Center	060011
19740	Denver-Aurora-Lakewood, CO	Presbyterian St. Luke's Medical Center	060014
19740	Denver-Aurora-Lakewood, CO	Centura Health-St. Anthony Hospital	060015
19740	Denver-Aurora-Lakewood, CO	University of Colorado Hospital Anschutz Inpatient Pavilion	060024
14500	Boulder, CO	Boulder Community Foothills Hospital	060027
19740	Denver-Aurora-Lakewood, CO	Saint Joseph Hospital	060028
19740	Denver-Aurora-Lakewood, CO	Rose Medical Center	060032
19740	Denver-Aurora-Lakewood, CO	Swedish Medical Center	060034
19740	Denver-Aurora-Lakewood, CO	North Suburban Medical Center	060065
19740	Denver-Aurora-Lakewood, CO	Medical Center of Aurora	060100
14500	Boulder, CO	Centura Health-Avista Adventist Hospital	060103
19740	Denver-Aurora-Lakewood, CO	St. Anthony North Health Campus	060104
19740	Denver-Aurora-Lakewood, CO	National Jewish Health	060107
19740	Denver-Aurora-Lakewood, CO	Sky Ridge Medical Center	060112
19740	Denver-Aurora-Lakewood, CO	Centura Health-Littleton Adventist Hospital	060113
19740	Denver-Aurora-Lakewood, CO	Parker Adventist Hospital	060114
14500	Boulder, CO	Good Samaritan Medical Center	060116
19740	Denver-Aurora-Lakewood, CO	OrthoColorado Hospital at St. Anthony Medical Campus	060124
19740	Denver-Aurora-Lakewood, CO	Castle Rock Adventist Hospital	060125

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Security Act (the Act) to repeal the Medicare sustainable growth rate and strengthen Medicare access by improving physician payments and making other improvements, to reauthorize the Children's Health Insurance Program (CHIP), and for other purposes. This rule is needed to propose policies to improve physician payments by changing the way Medicare incorporates quality measurement into payments and by developing new policies to address and incentivize participation in alternative payment models.

This proposed rule would establish the Merit-Based Incentive Payment System (MIPS), a new program for certain Medicare-participating practitioners. MIPS would consolidate

(a) MIPS

In establishing MIPS, this rule would define MIPS program participants as "MIPS eligible clinicians" rather than "MIPS EPs" as that term is defined at section 1848(q)(1)(C) and used throughout section 1848(q) of the Act. MIPS eligible clinicians will include physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, and groups that include such clinicians. The rule proposes definitions and requirements for groups. In addition to proposing definitions for MIPS eligible clinicians, the rule also proposes rules for the specific Medicare-enrolled practitioners that would be excluded from MIPS, including newly Medicare-enrolled eligible clinicians, Qualifying

Federal Register: TKR Preop Abs, Identify Prosthesis in op report

Patient Safety	Registry	Process	**Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet:** Percentage of patients regardless of age or gender undergoing a total knee replacement who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet.	American Association of Hip and Knee Surgeons
Patient Safety	Registry	Process	**Total Knee Replacement: Identification of Implanted Prosthesis in Operative Report:** Percentage of patients regardless of age or gender undergoing a total knee replacement whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of each prosthetic implant.	American Association of Hip and Knee Surgeons

Hip and Knee Functional impairment, Osteoporosis

Proposed Substantive Change	• Revise measure title to read: Functional Status Change for Patients with Knee Impairments • Revise measure description to read: A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change in functional status assessed using FOTO's (knee) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality • Revise measure type from a process measure to an outcome measure
Steward:	Focus on Therapeutic Outcomes, Inc.
Rationale:	CMS proposes to revise the measure title and description to align with the NQF-endorsed version of the measure. The measure owner revised the title and description of the measure to be consistent with the change in numerator details that now calculate the change in functional status score and denominator details that include patients that completed the FOTO knee FS PROM at admission and discharge. Additionally, this change in numerator and denominator details entails that the measure type changes from process to outcome
Measure Title:	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Hip Impairments
MIPS ID Number:	N/A
NQF/PQRS #:	0423/218
CMS E-Measure ID:	N/A
National Quality Strategy Domain:	Communication and Care Coordination
Current Data submission Method:	Registry
Current Measure Type:	Outcome
Current Measure Description:	Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the hip in which the change in their Risk-Adjusted Functional Status is measured

Measure Title:	Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Knee Impairments
MIPS ID Number:	N/A
NQF/PQRS #:	0422/217

CMS E-Measure ID:	N/A
National Quality Strategy Domain:	Communication and Care Coordination
Current Data submission Method:	Registry
Current Measure Type:	Process
Current Measure Description:	Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the knee in which the change in their Risk-Adjusted Functional Status is measured
Proposed Substantive Change	• Revise measure title to read: Functional Status Change for Patients with Knee Impairments • Revise measure description to read: A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change

Effective Clinical Care	Claims, Registry	Process	**Osteoporosis Management in Women Who Had a Fracture:** The percentage of women age 50-85 who suffered a fracture and who either had a bone mineral density test or received a prescription for a drug to treat osteoporosis.	National Committee for Quality Assurance/ American Medical Association-Physician Consortium for Performance Improvement

TKA/THA patient reported functional status assessment

11. Orthopedic Surgery				
Registry, Measures Group	Process	Person and Caregiver-Centered Experience and Outcomes	Patient-Centered Surgical Risk Assessment and Communication Percentage of patients who underwent a non-emergency surgery who had their personalized risks of postoperative complications assessed by their surgical team prior to surgery using a clinical data-based, patient-specific risk calculator and who received personal discussion of those risks with the surgeon	American Association of Hip and Knee Surgeons
Measures Group	Process	Person and Caregiver-Centered Experience and Outcomes	Functional Status Assessment for Total Knee Replacement Percentage of patients 18 years of age and older with primary total knee arthroplasty (TKA) who completed baseline and follow-up patient-reported functional status assessments	Centers for Medicare & Medicaid Services/ National Committee for Quality Assurance
EHR	Process	Person and Caregiver-Centered Experience and Outcomes	Functional Status Assessment for Total Hip Replacement Percentage of patients 18 years of age and older with primary total hip arthroplasty (THA) who completed baseline and follow-up (patient-reported) functional status assessments	Centers for Medicare & Medicaid Services/ National Committee for Quality Assurance

AJRR/QCDR

The American Joint Replacement Registry Orthopaedic Quality Resource Center in Collaboration with CECity	9400 W. Higgins Road, Suite 210, Rosemont, IL 60018 847-292-0530 http://www.ajrr.net	Yes	Individual EPs, GPRO Group Practice	No	Physician Compare	**NQS Domain 1 Communication and Care Coordination:** 024, 131, 217, 350 **NQS Domain 2 Community/Population Health:** 226 **NQS Domain 3 Effective Clinical Care:** 001 , 356, 357, 418 **NQS Domain 5 Patient Safety:** 021, 022, 023, 130, 351, 352, 353, 355 **NQS Domain 6 Person and Caregiver Centered Experience and Outcomes:** 109, 358, 375, 376 **eCQMs:** 001, CMS122v4, 226, CMS138v4, 376, CMS56v4, 375, CMS66v4	• Postoperative Complications within 90 Days Following the Procedure • Health and Functional Improvement • Shared Decision-Making: Trial of Conservative (Non-surgical) Therapy • Venous Thromboembolic and Cardiovascular Risk Evaluation	The The American Joint Replacement Registry Orthopaedic Quality Resource Center non-PQRS Measure Specifications are located here: https://www.medconcert.com/ajrr	This QCDR collects medical and/or clinical data for the purpose of patient and disease tracking to foster improvement in the quality of care provided to patients. **Services:** The AJRR Orthopaedic Quality Resource Center in collaboration with CECity is intended to foster performance improvement for orthopaedic surgeons. Who should enroll? Orthopaedic Surgeons, including AJRR current participants and nonparticipants. Where to enroll? Learn more at http://www.medconcert.com/ajrr Annual Member Fee: $439 per Eligible Professional PQRS Reporting: Auto-generated report on up to 36 quality measures for PQRS and VBM. Key Features and Benefits: • Continuous performance feedback reports. • Improve population health and manage VBM quality scores. • Comparison to national benchmarks (where available) and peer-to-peer comparison. • Performance gap analysis & patient outlier identification (where available). • Links to targeted education, tools and resources for improvement. • Performance aggregation at the practice and organization level available. Cost: Annual Fee: $439 per provider.

AJRR/QCDR

2016 Physician Quality Reporting System Qualified Clinical Data Registries

CMS is pleased to announce the Qualified Clinical Data Registries (QCDRs) that will be able to report quality measure data to CMS, on behalf of eligible professionals (EPs) for the 2016 Physician Quality Reporting System (PQRS) program year (PY). These entities have self-nominated and indicated that they meet the requirements as outlined by CMS in the 2016 Medicare Physician Fee Schedule (MPFS) final rule. The 2016 QCDRs are able to report quality measure data to CMS, on behalf of individual EPs, Group Practice Reporting Organization (GPRO) group practices, or both for the PY 2016 PQRS (please check your specific QCDR to ensure they support your reporting method). In addition to PQRS, the data submitted by QCDRs may also be used for other CMS initiatives like the Value-based Payment Modifier, Physician Compare, and the EHR Incentive Program. If the EP is attempting to receive credit for the Clinical Quality Measure (CQM) component of meaningful use for the EHR Incentive Program the QCDR must be considered Certified Electronic Health Record Technology (CEHRT) and the measure data must come from the EP's CEHRT. For more information on reporting via QCDR, please review the Qualified Clinical Data Registry Reporting page of the PQRS website.

Individual EPs and PQRS group practices wishing to participate in a QCDR for PY 2016 should review the qualified entities listed in the table below. Each of the 2016 QCDRs have provided detailed information including their contact information, the measures they support, the services they offer and the costs incurred by their clients.

Disclaimer: Each vendor has reviewed their organization's information below and provided confirmation of accuracy. Information included in this document was accurate at the time posting; however CMS cannot guarantee that these services will be available or that the vendor will be successful uploading their files during the submission period. CMS cannot guarantee an eligible professionals success in providing data for the program. Successful submission is contingent upon following the PQRS program requirements, the timeliness, quality, and accuracy of the eligible professionals data provided for reporting, and the timeliness, quality, and accuracy of the XML programming of the vendor.

QCDR Intermediary, Quality Measures selected annually

request targeted review.

We propose requirements for third-party data submission to MIPS. Specifically, qualified registries, QCDRs, health IT vendors, and CMS-approved survey vendors would have the ability to act as intermediaries on behalf of MIPS eligible clinicians and groups for submission of data to us across the quality, CPIA, and advancing care information performance categories.

We also propose a process for public

facing MIPS eligible clinicians.

Quality measures would be selected annually through a call for quality measures process. Selection of these measures is proposed to be based on certain criteria that align with CMS priorities, and a final list of quality measures will be published in the **Federal Register** by November 1 of each year. Under the standards proposed in this rule, there would be options for

	Registry	Process	Communication and Care Coordination	Total Knee Replacement: Shared Decision-Making: Trial of Conservative (Non-surgical) Therapy Percentage of patients regardless of age or gender undergoing a total knee replacement with documented shared decision-making with discussion of conservative (non-surgical) therapy (e.g. Nonsteroidal anti-inflammatory drugs (NSAIDs), analgesics, weight loss, exercise, injections) prior to the procedure	American Association of Hip and Knee Surgeons
	Registry	Process	Patient Safety	Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation Percentage of patients regardless of age or gender undergoing a total knee replacement who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure (e.g. history of Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE), Myocardial Infarction (MI), Arrhythmia and Stroke)	American Association of Hip and Knee Surgeons
	Registry	Process	Patient Safety	Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet Percentage of patients regardless of age or gender undergoing a total knee replacement who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet	American Association of Hip and Knee Surgeons
	Registry	Process	Patient Safety	Total Knee Replacement: Identification of Implanted Prosthesis in Operative Report Percentage of patients regardless of age or gender undergoing a total knee replacement whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of each prosthetic implant	American Association of Hip and Knee Surgeons

11. Orthopedic Surgery				
Claims, Registry	Process	Patient Safety	Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, who had an order for a first OR second generation cephalosporin for antimicrobial prophylaxis	American Medical Association-Physician Consortium for Performance Improvement/ National Committee for Quality Assurance
Claims, Registry	Process	Patient Safety	Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients) Percentage of surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated Heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time	American Medical Association-Physician Consortium for Performance Improvement/ National Committee for Quality Assurance
Claims, Registry	Process	Person and Caregiver-Centered Experience and Outcomes	Osteoarthritis (OA): Function and Pain Assessment Percentage of patient visits for patients aged 21 years and older with a diagnosis of osteoarthritis (OA) with assessment for function and pain	American Academy of Orthopedic Surgeons

Person and Caregiver-Centered Experience and Outcomes	EHR	Process	**Functional Status Assessment for Total Knee Replacement:** Percentage of patients aged 18 years of age and older with primary total knee arthroplasty (TKA) who completed baseline and follow-up patient-reported functional status assessments.	Centers for Medicare & Medicaid Services/National Committee for Quality Assurance
Person and Caregiver-Centered Experience and Outcomes	EHR	Process	**Functional Status Assessment for Total Hip Replacement:** Percentage of patients 18 years of age and older with primary total hip arthroplasty (THA) who completed baseline and follow-up (patient-reported) functional status assessments.	Centers for Medicare & Medicaid Services/National Committee for Quality Assurance

	risk-adjusted functional status is measured
Proposed Substantive Change	• Revise measure title to read: Functional Status Change for Patients with Hip Impairments • Revise measure description to read: A self-report measure of change in functional status for patients 18 years+ with hip impairments. The change in

	functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality
Steward:	Focus on Therapeutic Outcomes, Inc.
Rationale:	CMS proposes to revise the measure title and description to align with the NQF-endorsed version of the measure. The measure owner revised the title and description of the measure to be consistent with the change in numerator details that now calculate the average change in functional status scores in patients who were treated in a 12 month period and denominator details that include patients that completed the FOTO hip FS PROM at admission and discharge.
Measure Title:	Functional Deficit: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Lower Leg, Foot or Ankle Impairments
MIPS ID Number:	N/A
NQF/PQRS #:	0424/219
CMS E-Measure ID:	N/A

improvement	
Osteoarthritis (OA): Function and Pain Assessment: Percentage of patient visits for patients aged 21 years and older with a diagnosis of osteoarthritis (OA) with assessment for function and pain.	American Academy of Orthopedic Surgeons

Registry	Outcome	**Functional Status Change for Patients with Knee Impairments:** A self-report measure of change in functional status for patients 18 year+ with knee impairments. The change in functional status assessed using FOTO's (knee) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.	Focus on Therapeutic Outcomes, Inc.
Registry	Outcome	**Functional Status Change for Patients with Hip Impairments:** A self-report measure of change in functional status for patients 18 years+ with hip impairments. The change in functional status assessed using FOTO's (hip) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.	Focus on Therapeutic Outcomes, Inc.
Registry	Outcome	**Functional Status Change for Patients with Foot and Ankle Impairments:** A self-report measure of change in functional status for patients 18 years+ with foot and ankle impairments. The change in functional status assessed using FOTO's (foot and ankle) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance measure at the patient level, at the individual clinician, and at the clinic level to assess quality.	Focus on Therapeutic Outcomes, Inc.
Registry	Outcome	**Functional Status Change for Patients with Lumbar Impairments:** A self-report outcome measure of functional status for patients 18 years+ with lumbar impairments. The change in functional status assessed using FOTO's (lumbar) PROM is adjusted to patient characteristics known to be associated with functional status outcomes (risk-adjusted) and used as a performance	Focus on Therapeutic Outcomes, Inc.

Screening for Osteoporosis for Women Aged 65-85 Years of Age: Percentage of female patients aged 65-85 years of age who ever had a central dual-energy X-ray absorptiometry (DXA) to check for osteoporosis.	National Committee for Quality Assurance / American Medical Association-Physician Consortium for Performance Improvement
Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin: Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, who had an order for a first OR second generation cephalosporin for antimicrobial prophylaxis.	Assurance / American Medical Association-Physician Consortium for Performance Improvement/ National Committee for Quality Assurance
Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients): Percentage of surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated Heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time.	American Medical Association-Physician Consortium for Performance Improvement/ National Committee for Quality

§ 414.1330 Quality performance category.

(a) For purposes of assessing performance of MIPS eligible clinicians on the quality performance category, CMS will use:

(1) Quality measures included in the MIPS final list of quality measures.

(2) Quality measures used by QCDRs.

(b) Subject to CMS's authority to reweight performance category weights under section 1848(q)(5)(F) of the Act, performance in the quality performance category will comprise:

(1) 50 percent of a MIPS eligible clinician's composite performance score for 2019.

(2) 45 percent of a MIPS eligible clinician's composite performance score for 2020.

(3) 30 percent of a MIPS eligible clinician's composite performance score for each year thereafter.

§ 414.1335 Data submission criteria for the quality performance category.

(a) *Criteria.* A MIPS eligible clinician or group must submit data on MIPS quality measures in one of the following manners, as applicable:

(1) *Via claims, qualified registry, EHR or QCDR submission mechanism.* For the 12-month performance period—

(i) Submit data on at least six measures including one cross-cutting measure and at least one outcome measure. If an applicable outcome measure is not available, report one other high priority measure (appropriate use, patient safety, efficiency, patient

Metabolic		
21	**Osteoporosis** msk - other-nos - osteoporosis_Method A.xls Osteoporosis (Osteopor) episode is triggered by two (2) E&Ms with a principal or secondary diagnosis of any Osteoporosis trigger code occurring within 30 calendar days. This episode is intended to capture all services related to the medical management and treatment of Osteopor.	No

24	**Hip/Femur Fracture or Dislocation Treatment, Inpatient (IP)-Based** Px - ortho - treat fx-disloc - hip-femur - open_Method_A.xls Fracture/dislocation of hip/femur (HIPFxTx) episode is triggered by a patient claim with any of the interventions assigned as HIPFxTx trigger codes. HIPFxTx can be triggered by either an ICD procedure code or CPT codes in any setting.	Yes
25	**Hip Replacement or Repair** Px - ortho - hip proc - replacement_Method_A.xls Hip replacement procedure (HipRepRev) episode is triggered by a patient claim with any of the interventions assigned as HipRepRev trigger codes. HipRepRev can be triggered by either an ICD procedure code, CPT, or HCPC codes in any setting.	No
26	**Knee Arthroplasty (Replacement)** Px - ortho - knee proc - replacement_Method_A.xls Knee replacement procedure (KneeRepRev) episode is triggered by a patient claim with any of the interventions assigned as KneeRepRev trigger codes. KneeRepRev can be triggered by either ICD procedure codes or CPT codes in any setting.	No
27	**Spinal Fusion** Px - ortho - spine proc – lumbar.xls Spinal Fusion (SpineLumb) episode is triggered by a patient's claim with any of the interventions assigned as SpineLumb trigger codes. SpineLumb can be triggered by either an ICD procedure code, or CPT codes in any setting (e.g., hospital, surgical center).	No

Musculoskeletal		
6	**Hip Replacement or Repair** Hip_Rep_or_Repair_Episode_Definitions_MethodB_2015Sept.xlsx Procedural episodes are triggered by the presence of a trigger CPT/HCPCS code on a claim when the code is the highest cost service for a patient on a given day.	Yes
7	**Knee Arthroplasty (Replacement)** Knee_Arthroplasty_Episode_Definitions_MethodB_2015Sept.xlsx Procedural episodes are triggered by the presence of a trigger CPT/HCPCS code on a claim when the code is the highest cost service for a patient on a given day.	Yes

Evidence-based References

- Porter ME. What is value in health care? N Engl J Med 2010;363:2477-81. DOI: 10.1056/NEJMp1011024
- Molina CS, Thakore RV, Blumer A, et al. Use of the National Surgical Quality Improvement Program in Orthopaedic Surgery. Clin Orthop Relat Res. 2015 May;473(5):1574-1581
- Federal Register, Vol 81, No. 89/Monday, May 9, 2016