NATIONAL QUALITY FORUM

Surgery Committee

Off-Cycle Webinar

September 18, 2017

Agenda

- Welcome and Introductions
- Presentation: Measure Madness and Electronic Clinical Quality Measures
- Presentation: Current Practice and Measurement Gaps- Perioperative Care
- Presentation: Performance Measure Proposals- AAOS Surgical Management of the Knee PM Committee
- Committee Discussion
- Next Steps
- Public Comment

Welcome and Introductions

Surgery Committee Members

- Karl Bilimoria, MD, MS
- Robert Cima, MD, MA
- Richard Dutton, MD, MBA
- Elisabeth Erekson, MD, MPH
- **Lee Fleisher, MD (Co-Chair)**
- Frederick Grover, MD
- **William Gunnar, MD, JD (Co-Chair)**
- John Handy, MD
- Mark Jarrett, MD, MBA
- Clifford Ko, MD, MS, MSHS, FACS
- Barbara Levy, MD, FACOG, FACS
- Barry Markman, MD
- Kelsey McCarty, MS, MBA
- Lawrence Moss, MD
- Amy Moyer, MS, PMP
- Keith Olsen, PharmD, FCCP, FCCM
- Collette Pitzen, RN, BSN, CPHQ
- Lynn Reede, DNP, MBA, CRNA
- Christopher Saigal, MD, MPH
- Salvatore T. Scali, MD
- Allan Siperstein, MD
- Larissa Temple, MD
- Melissa Thomason, MS, PMP
- Barbee Whitaker, PhD
- A.J. Yates, MD

NQF Staff

- Kathryn Goodwin, Senior Project Manager

Off-Cycle Activities

- What is considered “off-cycle”?
  - *During the periods in which no measures are being reviewed, or the “off cycle”, these are Standing Committee activities that may occur outside a funded project’s scope.*
  - *In order to enable ongoing engagement of committee members throughout their two (or three) year terms, NQF will host quarterly, two-hour web meetings or conference calls for each Standing Committee during the off cycle timeframe.*

Measures Madness

September 18, 2017

Mark P. Jarrett, MD, MBA, MS
Chief Quality Officer

Northwell Health℠ Institute for Clinical Excellence & Quality

Why Do We Measure?

Improvement of care requires metrics: need to know where you were, where you are, and where you are going

- "Non-Performance Improvement" Audiences
- CMS
- Insurers
- Regulatory agencies, e.g. NYSDOH Cardiac database
- *Patients and Families*

Proliferation of Measures

- In 2014 CMS had 33 different programs with 850 unique measures
- NQF has endorsed 635 healthcare quality measures
- Commercial P4P has others
- HVHC Project: paring down 98 CMS measures (some composites)

IOM *Vital Signs* Report

- Need to integrate measurements with EHR capabilities
- *JAMA* (August 2017):
  The Cost of Quality
- *Health Affairs* (March 2016):
  US Physician Practices Spend More Than **$15.4 Billion** Annually To Report Quality Measures

John Hopkins Study 2016

"These measures have the ability to misinform patients, misclassify hospitals, misapply financial data and cause unwarranted reputational harm to hospitals. If the measures don't hold up to the latest science, then we need to re-evaluate whether we should be using them to compare hospitals."

Dr. Peter Pronovost author and Director of the Armstrong Institute

Report Card Madness: Leapfrog

- Only 1750 Hospitals participate
  - Can't normalize
  - Self selection
- Combines Risk and Non-Risk Adjusted Data
- Different times for different measures – not valid
- Self-reported non-validated results

CMS Stars for Quality

CMS rates hospitals with Stars (1- 5) based on 7 categories of measures:

- Mortality
- Safety of care
- Readmissions
- Patient experience
- Effectiveness of care
- Timeliness of care
- Efficient use of medical imaging

CMS Stars for Quality: AAMC Response

- Misrepresent hospital quality
- Certain quality measures flawed and that disproportionately impacts teaching hospitals
- Methodology has no socio-demographic adjustment
- Lack of transparency around data used to calculate results

Measures That Matter: HANYS Report*

- Measures should reflect “clinical reality”
- Parsimony of measures that have standardized definitions
- Collection is part of the normal workflow
- Providers will focus on the most serious safety concerns

October, 2013

Recommendations

- Streamline
- Align
- Focus
- Collaborate
- Actionable and Meaningful

Metrics That Matter for Population Health
NAS Workshop Report 2016

- Access to health services
- Environmental quality
- Injury and violence
- Mental health
- Nutrition, physical activity, and obesity
- Oral health
- Social Determinants
- Substance abuse

eCQM's: Harnessing the EHR

- Minimizes human coder variability and cost
- Can theoretically used for concurrent care: Improve the care of the patient – not the report or scorecard

eCQM Landmines

- EHR's not well designed for this: multiple places for documentation – clinical workflow mismatch
- Doesn't correlate with claims, which are may produce a potential compliance issue
- Meaningful Use and eCQM's: Hospitals didn't see a ROI and it delayed other IT projects

Questions?

Current Practice and Measurement Gaps in Perioperative Care

Richard P. Dutton, MD MBA
Chief Quality Officer
US Anesthesia Partners

Disclaimer

- I've worked in this space for a while
- I am well-informed regarding anesthesia measures
- I am less well-informed about surgical specialty measures
- NQF currently lists 1100 measures and 107 portfolios …
  - *317 Outcome measures*
  - *31 patient reported outcomes*

- I don't know what I don't know!

Broadly …

- Measures that cover multiple kinds of surgical cases
  - *Perioperative infection rate, reoperation rate, mortality, sentinel events*
- Measures that capture important long-term outcomes
  - *Back to work/normal activities*
  - *Reduction in pain*
  - *Cancer recurrence*
  - *Cognitive function*
- Reduction in opioid prescription / use / abuse
- Surgical patient satisfaction: “Would you do it again?”

More Specifically …

- Measures which include both surgical and anesthesia components
  - *Survival after cardiac surgery*
  - *Uncomplicated screening colonoscopy*
  - *Transfusion rates*
  - *"Enhanced recovery"*
- Measure for procedures done "out of OR"
  - *GI lab*
  - *Surgery centers*
  - *Cardiac electrophysiology*

And Even More Specifically …

- Neurosurgery
- Otolaryngology
- Urology
- Trauma
- Plastic surgery
- Gastroenterology
- Transplant

Performance Measure Proposals: AAOS Surgical Management of the Knee PM Committee

A.J. Yates, Jr., MD
Chief of Orthopaedic Surgery UPMC Shadyside
Associate Professor
Vice Chairman for Quality Management
UPMC Department of Orthopaedic Surgery

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Medicare Access and CHIP Reauthorization Act (MACRA)

- New measures are in development for the Merit-based Incentive Payment System (MIPS) and will be asked to be consistent with those used in Advanced Alternative Payment Models (APMs) and CJR
- These can be delivered through Qualified Clinical Data Registry (QCDR) approved registries (e.g., American Joint Replacement Registry (AJRR))
- Surgeons within MIPS will choose those Performance Measures (PMs) that are best risk adjusted
- Such measures are likely to be harmonized with CJR and its variants

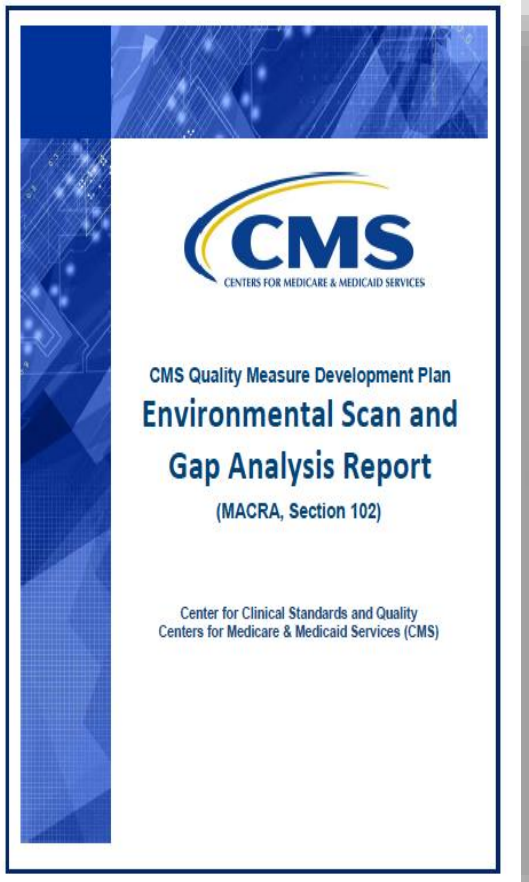

Table 5: Conceptual Framework With Counts of Existing Measures by CMS Quality Domain, Topic, and Specialty

Key: Measure subtopics highlighted in gray = measures identified that were proposed for the Quality Payment Program; cells shaded in blue indicate a given topic is not applicable to that specialty.

CMS Quality Domain/ MACRA Domain	Topic	Specialty						
		General Medicine/ Crosscutting	Mental Health/ Substance Use Conditions	Oncology	Orthopedic Surgery	Palliative Care	Pathology	Radiology
Effective Treatment/ Clinical Care	Outcomes	- Care goal achievement (0) - Intermediate outcomes (e.g., HbA1c, BP) (17; 6 of 17 in OPP NPRM) - Medication adherence and persistence (4) - Multiple chronic/ complex conditions (0)	- Medication adherence and persistence (3; 1 of 5 in OPP NPRM) - Mortality (1) - Multiple chronic/ complex conditions (1) - Recovery-oriented outcomes (1) - Suicide (2)	- Care goal achievement (0) - Disease-free survival for X years (0) - Five-year cure rate (0) - Outcomes for medical, surgical, radiation treatment (0) - Pain control (0) - Specific cancer survival rates (0) - Stage-specific survival rates (0)	- Adverse events surrounding surgery (post-operative cellulitis, pneumonia, etc.) (0) - Complications from procedures (0) - ED visits post-surgery (0) - Length of stay (0) - Return to surgery (0)	- Comfort at end of life (1) - Maintaining dignity and independence (0) - Symptom management (0)	No subtopics identified	No subtopics identified
	PRO-PMs	- Care goal achievement (0) - Functional status (3) - Health-related QOL (1) -Patient activation/ engagement (1)	- Care goal achievement (0) - Functional status (4; 2 of 4 in OPP NPRM) - Health-related QOL (0) - Patient activation/ engagement (0)	- Care goal achievement (0) - Functional status pre/post treatment (0) - Health-related QOL (0) - Patient activation/ engagement (0)	- Care goal achievement (0) - Functional status pre/post orthopedic treatment/joint specific (9; 7 of 9 in OPP NPRM) - Health-related QOL (0) - Patient activation/ engagement (0)	- Care goal achievement (0) - Functional status (0) - Health-related QOL (0)	No subtopics identified	No subtopics identified
Patient Safety/ Safety	Diagnostic Accuracy	- Diagnostic accuracy (0)	- Diagnostic accuracy (0)	- Diagnostic accuracy (0)	- Diagnostic accuracy (0)	No subtopics identified	- Diagnostic accuracy (0) - Timely diagnosis (0)	- Cancer detection (0) - Diagnostic accuracy (1)
	Medication Safety	- Adverse drug events (anticoagulants) (1) - Adverse drug events (diabetic agents) (0) - Antibiotic stewardship (4) - Inappropriate medication use (4; 1 of 4 in OPP NPRM) - Medication management/ reconciliation (5; 2 of 5 in OPP NPRM) - Medication side effects (1) - Opioids (2; 1 of 2 in OPP NPRM)	- Medication management/ reconciliation (0) - Medication side effects (5) - Opioids (0)	- Medication side effects (0)	- Medication side effects (0)	- Medication side effects (0)	No subtopics identified	- Contrast-related adverse events (0)

- Effective Treatment
  - Outcomes
  - PRO-PMs
- Patient Safety
  - Diagnostic
  - Medication
- Communication/Coordination
  - Team Based Care
  - New Technology
- Experience/Engagement
  - SDM
  - PRO-PM
- Population Health
- Affordable Care

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HSAG/CMS Gap Analysis Report

CMS Quality Domain/ MACRA Domain	Topic	Specialty						
		General Medicine/ Crossouting	Mental Health/ Substance Use Conditions	Oncology	Orthopedic Surgery	Palliative Care	Pathology	Radiology
Communication and Coordination/Care Coordination	Assessing Team-Based Care	- Bidirectional sharing of information (0) - Communication between patient and provider (0) - Communication between providers (2) - Physical-mental health integration (0)	- Physical-mental health integration (0)	- Team-based care (1)	- Surgical care continuum (preoperative, perioperative, intraoperative, postoperative, and post-discharge) (0)	- Team-based care (0) - Team-based care plan (0)	- Communication between pathologists and clinicians regarding final results reports (1) - Correlation of findings (0) - Timely and directed patient treatment decision-support and care coordination efforts (0)	- Communication between radiologists and clinicians regarding final results reports (0) - Correlation of findings (0)
	Effective Use of New Technology	- Interoperability to enhance communication (1) - Telehealth (2)	- Telehealth (0)	- Telehealth (0)	- Telehealth (0)	- Telehealth (0)	- Telehealth (0)	- DICOM image availability (2) - Telehealth (0)
Person and Family Engagement/ Patient and Caregiver Experience	Personal Preference and Shared Decision-Making	- Ability for care self-management (0) - Fidelity to care plan and attainment of goals (0) - Information provided at appropriate times (0) - Patient understanding (0) - Treatment options and/or care goal presented to determine patient preferences (2)	- Treatment options and/or care goal presented to determine patient preferences (0)	- Hospice and end of life metrics for medical oncology (0) - Treatment options and/or care goal presented to determine patient preferences (0)	- Treatment options and/or care goal presented to determine patient preferences (1)	- Hospice and end of life preferences (2; 1 of 2 in OPP NPRM)	No subtopics identified	- Diagnostic options consistent with patient preferences (0)
	PRO-PMs	- Patient/ caregiver experience (1)	- Patient/caregiver experience (4)	- Patient/caregiver experience (0)	- Patient/caregiver experience (1)	- Patient/caregiver experience (0)	No subtopics identified	No subtopics identified

CMS Quality Domain/ MACRA Domain	Topic	Specialty						
		General Medicine/ Crossouting	Mental Health/ Substance Use Conditions	Oncology	Orthopedic Surgery	Palliative Care	Pathology	Radiology
Healthy Living/ Population Health and Prevention	Population-Level Outcomes	- Alcohol/substance use (4) - Community engagement (0) - Criminal justice (0) - Employment (0) - Healthy communities (0) - Housing (1) - Life expectancy (0) - Overweight and obesity (0) - Preventive services (0) Tobacco use (5) - Unintended pregnancy (0) - Well-being (0)	- Alcohol/substance use (0) - Criminal justice (0) - Employment (0) - Housing (2) - Suicide (1) - Tobacco use (0)	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified
	Detection/ Prevention of Chronic Disease	- Alcohol/substance use (1) - Immunizations (0; 2 of 6 in OPP NPRM) - Screening measures (16; 9 of 16 in OPP NPRM) - Tobacco use (2; 1 of 3 in OPP NPRM)	- Alcohol/substance use (1) - Screening measures (1) - Tobacco use (0)	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified	No subtopics identified

CMS Quality Domain/ MACRA Domain	Topic	Specialty						
		General Medicine/ Crossouting	Mental Health/ Substance Use Conditions	Oncology	Orthopedic Surgery	Palliative Care	Pathology	Radiology
Affordable Care	Overuse Measures	- Appropriate use (7; 6 of 7 in OPP NPRM)	- Appropriate use (0)	- Appropriate use (3; 2 of 3 in OPP NPRM) - ER Utilization (1) - Inpatient hospital admission rate (1)	- Appropriate use (0)	- Appropriate use (0)	- Appropriate use (0)	- Appropriate use (7; 6 of 7 in OPP NPRM)

Orthopaedic Surgery has no measures except two, one under SDM and the other under evaluation of experience

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Overview

- **Need:** The MIPS process within MACRA requires numerous performance measures to adjudge quality. Orthopaedics is a high priority for CMS and devoid of such PM's across multiple critical domains. Outcome measures have higher value than process measures
- Total knee arthroplasty, when combined with total hip, represents the single greatest procedural cost set for CMS, is elective, and carries high expectations from patients and payers.
- The following is a broad overview of our work in progress to meet the above needs. The ongoing formatting, and development of exclusions, risk adjustments, and scientific evidence are much more detailed than time allows and are intended to be endorsable at the level of the NQF.

AAOS Surgical Management of the Knee PM Committee Measures in Development

- Four Process Measures
  - Based on Level One CPG Evidence
- Two Structural Measures
- Two Outcomes Measures
  - One a PRO-PM
  - The other one claims based

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Process Measures in Development

- All based on level one evidence for best practice with strong recommendations in CPG
- All intended to be deliverable through EMR/registry
- All require provider to develop/initiate protocols for best practice
- All share accepted harmonized exclusion criteria (tumors, fracture, etc.)
- All can readily be crossed over to THA

Process Measures in Development

- Reversible risk reduction for patients with a high body mass index otherwise indicated for primary total knee arthroplasty
  - Requires evidence of process (in EMR) for referral of patient to care
  - Falls under safety, coordination, SDM, and population health domains
- Use pre-operative risk assessment tool as part of pre-operative counseling/shared decision
  - Tool has to be embedded in EMR/documented
  - Falls under safety, coordination, SDM and population health domains

Process Measures in Development

- Utilization of Early Mobilization Protocols
  - Credit for ordering pre-op (with EMR evidence of order)
  - Protocols need to be in place
  - Falls under safety and coordination of care domains
- Utilization of Multimodal Pain Management Protocols
  - Credit for ordering pre-op (with EMR evidence of order)
  - Protocols need to be in place
  - Falls under safety and coordination of care domains
  - Addresses new emphasis on opioid exposure reduction

Structural Measures in Development

- Participation in a joint registry for patients undergoing TKA
  - Ideally evolves to specifically require the AJRR, but kept broad for participants in Kaiser, VA, and regional registries in place
  - Critical need for registry data with known impact for care
  - Falls under safety, outcomes and population health domains
- Use of a PRO tool in Patients Undergoing elective TKA
  - Wide spread collection not routine
  - Requires the creation of process to routinely collect and report
  - Falls under safety, outcomes, and patient experience domains

Outcomes Measures in Development

- Patient-acceptable system state (PASS) 9-12 months s/p TKA
- The measurement of those patients that expect to go home after TKA that do go home and stay home without readmission, transfer to SNF, or return to ER (Expectation of Home Measure)

PASS

- One question PRO at nine to twelve months post-op
- Current working language: *“Taking into account all activities that you do during your daily life, your level of pain and also your functional impairment, do you consider the current state of your Left (Right) Knee to be satisfactory" with the response option of "yes" or "no”*
- Close, but not equivalent to MCID: One can reach one and not the other

PASS

- Fundamental question; was the patient helped?
  - The literature reports a 91% satisfaction rate with TKA
- Involves SDM/expectations, patient reported outcome, and perioperative management
- Risk adjustment will need to be developed, but is in part under the control of the surgeon in terms of patient selection and managing expectations; rudimentary data for risk adjustment already collected in the CJR PRO collection

PASS

- Falls under patient experience/PRO-PM and outcome domains
- One question, reportable through EMR/Registry routes
  - Low administrative burden
  - Transparent to patients, surgeons, and payers
  - Could be cross-cutting to other procedures with modification of the question

Expectation of Home Measure

- The literature shows that the best predictor of the patient being discharged to home after TKA is their expectation of the same; 95% who have that expectation do go home.
- At the time of agreeing to scheduling surgery, the patient and surgeon would agree upon that expectation as being realistic and the surgeon reports that expectation

Expectation of Home Measure

- **One important Requirement**: Ability to designate by code, at the time of scheduling surgery, the shared expectation of the surgeon and patient of discharge to home.
- **Denominator:** those patients expected to be discharged to home
- **Numerator**: those patients in the denominator that ***do not*** generate costs for SNF, IRF, ER, or readmitted as captured by claims data

Expectation of Home Measure

- **Scoring:** The ratio above minus the ratio of those patients that were not designated that did not generate the designated costs over all patients:

- DP=designated home patient
- NDP=not designated
- DPSH=Designated patient that went home and stayed home
- NDPSH=Non designated patient that went home and stayed home

- Score equation: (DPSH/DP)-(NDPSH/NDP+DP)

Exclusions:

1. Those patients for whom an ER visit or readmission is associated with a principal code that after 7 days would not be assigned as a complication within NQF 1550 (pneumonia, MI, sepsis.) and those not assigned after 30 days (PE, surgical bleeding)
2. Bilateral
3. Fractures
4. Tumors
5. Revisions
6. Transfers
7. Planned readmissions

Expectation of Home Measure

- No formal risk adjustment other than exclusions and that provided by the surgeon patient selection of patients expected to succeed
  - It is known that the more ill patients are more likely to need a SNF
  - The same is true for readmissions
  - It requires assessment of patients for the risk of both

Expectation of Home Measure: **Advantages**

- Potentially cross-cutting for all elective hospital based procedures.
- Internally risk adjusted
- It crosses many domains/targets; these include shared decision making, coordination of care, risk assessment, quality of care, and patient satisfaction
- Low reporting burden: Once the designation is made, the outcomes are captured through claims data
- Again, a mechanism for a code is needed

Future of Proposals

- Being assessed via the American Academy of Orthopaedic Surgeons (AAOS) Surgical Management of Osteoarthritis of the Knee (SMOAK) Performance Measure Work-Group Accepted
- Current preliminary approval and harmonization with the American Association of Hip and Knee Surgeons (AAHKS)
- Preliminary offer for help with testing from UPMC

Testing

- UPMC is the largest academic medical center based hospital system in the US
- Heavily invested in data management
- Has had to develop data management tools for the CJR
- It has an associated insurance plan (UPMC Health Plan) with Medicare Advantage options and an interest in value/performance measures equal to that of CMS
- The response to the CJR was the same for all patients across all payers.

Testing

- UPMC has already been capturing the rates of PRO capture and enrollment in the AJRR
- Current pathway adherence is assessed through orders and can capture risk assessment/mitigation/referrals as well as ordering of multimodal pain and early mobilization protocols
- The PASS question has been in use for one year
- The Health Plan has an interest in creating a code for the “Home” measure and can capture outcomes with claims data

Testing

- It is hoped that we will be able to show performance gaps, reliability, validity, and usability this calendar year
- Other members of the AAOS SMOAK PM work-group have been asked to make inquiries with their AMC's and the AJRR has been contacted for their assistance.

Thanks

Questions?

Committee Discussion

Public Comment

Next Steps

- Staff will draft and share a summary of today's call
- More info to come on future CDP projects

Project Contact Info

- Email: surgery@qualityforum.org
- NQF Phone: 202-783-1300
- Public project page: http://www.qualityforum.org/CDP_Standing_Committee_Off-Cycle_Activities.aspx
- Committee SharePoint site: http://share.qualityforum.org/Projects/surgery/SitePages/Home.aspx

Thank you!