Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, November 25th, 2024

Attendance:

Abess, Alex (Dartmouth)	Lewandowski, Kristyn (Corewell)
Abou Nafeh, Nancy (AUB)	Lopacki, Kayla (Mercy Health - Muskegon)
Addo, Henrietta (MPOG)	Lozon, Tim (Henry Ford - Wyandotte)
Armstrong-Browder, Lavonda (Henry Ford)	Lu-Boettcher, Eva (Wisconsin)
Barrios, Nicole (MPOG)	Mathis, Mike (MPOG)
Berndt, Brad (Bronson)	Malenfant, Tiffany (MPOG)
Bollini, Mara (WUSTL)	McComb, Joseph (Temple U)
Bow, Peter (Michigan)	McKinney, Mary (Corewell Dearborn / Taylor)
Bowman-Young, Cathlin (ASA)	Milliken, Christopher (Sparrow)
Brennan, Alison (Maryland)	Mirizzi, Kam (MPOG)
Bryant, Ayesha (UAB)	O'Conor, Katie (Johns Hopkins)
Buehler, Kate (MPOG)	O'Dell, Diana (MPOG)
Calabio, Mei (MPOG)	Owens, Wendy (MyMichigan - Midland)
Cassidy, Ruth (MPOG)	Pace, Nathan (Utah)
Chopra, Ketan (Henry Ford - Detroit)	Pantis, Rebecca (MPOG)
Clark, David (MPOG)	Pardo, Nichole (Corewell)
Cohen, Bryan (Henry Ford - West Bloomfield)	Parks, Dale (UAB)
Coleman, Rob (MPOG)	Penningon, Bethany (WUSTL)
Collins, Kathleen (St. Mary Mercy)	PIlat, Marianne (Sparrow)
Colquhoun, Douglas (MPOG)	Pimentel, Marc Phillip (B&W)
Corpus, Charity (Corewell Royal Oak)	Poindexter, Amy (Holland)
Cuff, Germaine (NYU)	Roselinsky, Howard (Yale)
Denchev, Krassimir (St Joseph Oakland)	Rozek, Sandy (MPOG)
DePasquale, Will (NYU Langone)	Saffary, Roya (Stanford)

Dewhirst, Bill (Dartmouth)	Schwerin, Denise (Bronson)
Doney, Allison (MGH)	Scranton, Kathy (Trinity Health St. Mary's)
Dutton, Richard (US Anes Partners)	Shah, Nirav (MPOG)
Elkhateb, Rania (UAMS)	Shettar, Shashank (OUHSC)
Esmail, Tariq (Toronto)	Smiatacz, Frances Guida (MPOG)
Everett, Lucy (MGH)	Spanakis, Spiro (UMass)
Finch, Kim (Henry Ford Detroit)	Stanislaus, Mellany (Johns Hopkins)
Gibbons, Miranda (Maryland)	Stierer, Tracey (Johns Hopkins)
Goatley, Jackie (Michigan)	Stewart, Alvin (UAMS)
Goldblatt, Josh (Henry Ford Allegiance)	Stumpf, Rachel (MPOG)
Hall, Meredith (Bronson Battle Creek)	Toonstra, Rachel (Corewell West & UMHS West)
Harwood, Tim (Wake Forest)	Tyler, Pam (Corewell Farmington Hills)
Heiter, Jerri (St. Joseph A2)	Vaughn, Shelley (MPOG)
Janda, Allison (MPOG)	Vitale, Katherine (Trinity Health)
Jewell, Elizabeth (MPOG)	Wade, Meredith (MPOG)
Johnson, Rebecca (Spectrum & UMHS West)	Wedeven, Chris (Holland)
Kaper, Jon (Corewell Trenton)	Weinberg, Aaron (Weill Cornell)
Khan, Meraj (Henry Ford)	Wissler, Richard (University of Rochester)
Kheterpal, Sachin (MPOG)	Yuan, Yuan (MPOG)
Kirke, Sarah (Nebraska)	Yoo, Ellie (NYU Langone)
LaGorio, John (Trinity Muskegon)	Zacharyasz, Katherine (Cleveland Clinic)
Liu, Linda (UCSF)	Zhu, Shu (Columbia)
Liwo, Amandiy (UAB)	Zittleman, Andrew (MPOG)

Agenda & Notes

Meeting Start: 10am

1. **Agenda**

2. **Roll Call**: Via Zoom or contact Coordinating Center (support@mpog.zendesk.com) if you were present but not listed on Zoom.

3. **Minutes from September 2024 Quality Committee Meeting**

4. **Announcements**

    1. Welcome Massachusetts Eye and Ear to MPOG!
    2. Welcome University Health Network to MPOG!
    3. Featured Member – November and December
        a. Jaime Hyman, MD – Yale School of Medicine

5. **2024 Meetings**

    1. Friday, April 11, 2025 – MSQC/ASPIRE Collaborative Meeting – Novi, MI
    2. Friday, July 18, 2025 – ASPIRE Collaborative Meeting, Henry Executive Center – Lansing, MI
        a. Will focus on regional anesthesia. Chris Wu, an anesthesiologist in New York, will be our keynote and discuss the plan of care ultrasound.
    3. Friday, September 2025 – ACQR Retreat, Location TBD
    4. Friday, October 10, 2025 – MPOG Retreat, San Antonio, Texas
    5. **Upcoming Events**

6. **Disseminating Aggregate Multicenter Data**

    1. Aggregate Multicenter MPOG Reports – Example Scenarios

        a. **QI Teams -** figure displaying aggregate anonymized performance for a QI measure as part of poster presentation
        b. **Quality Committee –** Our colleagues at ASA/AQI have requested permission to use a screenshot of MPOG QI Reporting Tool anonymized performance benchmarking graph
        c. **Recent Requests from Research Teams:**
            1. Table showing the **# of times ketorolac was administered** for pediatric tonsillectomies at each anonymized MPOG site
            2. Line graph showing monthly trend in % cases adherent to **NMB-05 QI metric** (use of quantitative twitch monitoring) for all MPOG institutions
        d. Please contact the CC before disseminating any results
        e. Coordinating Center reviews all request and will either approve (i.e., expediting review) or review at QC based on these 4 factors:

	Expedited Approval Pathway by DCC
Data Sensitivity	Low potential for data to stigmatize patients/clinicians; or dissemination outlet to promote misguided public perception
Data Quality	Mature phenotype, QI measure, or *commonly* used MPOG concept
Query Complexity	No/minimal DCC programmer effort required
Analysis Complexity	Descriptive statistics only (counts, %, mean/SD, median/IQR), typically resulting in a *single table or figure*

     f. <mark>Discussion:</mark>

1. **Tariq Esmail (UHN-Toronto):** Is there a plan for a central repository where our community can see where these things have been posted?
2. **Nirav Shah (MPOG Quality Director):** Great question. We have discussed capturing non-peer-reviewed publications, newsletter articles, and other types of press by creating a space on our website.

7. **Pediatric Subcommittee Updates**

   1. **Goal to build 2-3 specific metrics using a uniform peds cardiac cohort**
      a) In the process of refining Peds Cardiac Procedure phenotype.
      b) Plan to review blinded data variation for measures of interest at next meeting in early 2025 to inform measure build direction.
   2. **General Pediatrics Committee: PONV-04-Peds Measure Review**
   3. **Proposed Modifications: will be voted upon release of the new 2025 PONV guidelines**
      a) Success criteria → 1 agent for low-risk patients (0 risk factors), and combination therapy of two agents for higher risk (≥ 1 risk factor).
      b) Opioid risk factor → Multiple doses of any opioid intraop/postop
      c) Include Infants
      d) Consider Hydrocortisone IV as an antiemetic
      e) Add Anticholinesterase administration intraop as a risk factor

8. **MPOG Application Suite Upgrade: Coming Soon!**

   1. Upgrade package will be sent to each site's IT contact (if you do not know who this is for your site, contact support@mpog.zendesk.com)
   2. Sites Using Desktop Virtualization (e.g., Citrix): Your site's IT team will upgrade the App Suite
   3. Users using the App Suite installed on their PC: Your site's IT team will distribute the installer to all individuals at their site after the database upgrade has been applied.
   4. Release Notes will be posted on the MPOG website once upgrade is available in early December.

9. **Patient Blood Management Toolkit Released!**

   1. Blood Management for the OB Patient slide deck is now available on the MPOG Toolkit page under 'Patient Blood Management'

2. Will soon release an updated version of the existing transfusion toolkit for the Adult Surgical population
3. Please customize and adapt the content to meet your needs.
4. Feedback is always welcome!

10. **QI Reporting Tool Update**

    1. Removed individual provider access to specialty dashboards in MPOG QI Reporting Tool

       a) Currently individual providers have access to a dashboard (**My Measure Dashboard**) that includes measures that are in the monthly provider feedback emails
       b) They previously may have had access to the cardiac, pediatric, and OB dashboards filtered to their own cases. **This access has since been removed.**
       c) These dashboards were originally intended for quality champions and subspecialty practice leaders, not individual providers.
       d) Obstetric, cardiac, and pediatric site champions that only had access to one of the specialty dashboards (not full Quality Champion access), will also no longer have access to the departmental view of the specialty dashboards.
       e) A user must have full Quality Champion access to view any of the specialty dashboards at this time.
       f) In the future, Coordinating Center plans to add specific subspecialty measures to the "My Measure Dashboard" for individual providers to view.
       g) While overall usage of the QI Reporting Tool is somewhat low among individual providers, this change in access may generate questions to quality champions, so wanted to inform Quality Committee members.
       h) Quality Champions may request full departmental access for their specialty champions (peds, cardiac, OB) to allow them to view specialty dashboards in addition to All Measure and Site Directed measure dashboards.
          i. Coordinating Center will be releasing a new feature within the QIRT: 'Activity log' to allow Quality Champions to monitor dashboard usage and ensure transparency.

    2. QI Reporting Tool will be updated to make it easier to view data from a Health Equity perspective in 2025. We asked for participation, and several of you have already shown interest. If you cannot attend and want to get involved, please reach out directly (nirshah@med.umich.edu).

11. **2025 Measure Review Plan:** Busy schedule ahead however most of the assigned reviewers have already confirmed that they can do the review in 2025. Will form an ad hoc group to review sustainability measures. Interested participants are invited to attend.

12. **Measure Updates**
    1. ABX-03-C: Antibiotic Redosing, Open Cardiac
       a. Description: Percentage of adult patient undergoing an open cardiac procedure with an antibiotic re-dose initiate within four hours after initial antibiotic administration (cephalosporins only)

b. Three antibiotics excluded from this measure:
    1. Ceftriaxone and Cefotetan are excluded due to extended half-lives relative to other commonly used cephalosporins and therefore, re-dosing is not recommended for a typical cardiac case (these cases are excluded NOT flagged)
    2. Cefoxitin is also excluded as it is not typically used for cardiac cases and would require more frequent dosing (these cases are excluded NOT flagged)
c. Additional Updates:
    1. Updating to account for antibiotic infusions (will not require re-dose if infusion is still running)
    2. Also adding a 15-minute window for early dosing (re-dosed at 2 hours and 45 minutes instead of 3 hours)

2. SUS-02: Global warming Footprint, Maintenance
    a. Description: This measure analyzes the percentage of cases where carbon dioxide equivalents (CO_2 eq) normalized by hour for cases receiving inhalational anesthetic agents (desflurane, isoflurane, sevoflurane, or nitrous oxide) is less than CO_2 eq of 2% sevoflurane at 2L FGF = 2.83 kg CO_2/hr *or* the Total CO_2 eq is less than 2.83 kg CO_2 for the maintenance period of anesthesia.
    b. Updated the measure and code to allow MPOG to calculate Total FGF from component FGFs. Significant score changes for 4 sites and they were notified.
    c. Updated the measure to include conversion of Nitrous Inspired % to Nitrous flow (L/min). Minimal score changes
    d. Also updated SUS-03(GWF – Induction) and SUS-06 (FGF Induction, Peds)
    e. Fixed bug that temporarily improved everyone's SUS-02 scores by about 30%

3. TRAN-01 and TRAN-02:
    a. TRAN-01: Percentage of adult patients receiving a blood transfusion with documented hemoglobin or hematocrit value prior to administration
    b. TRAN-02: Percentage of adult patients with a post transfusion hemoglobin or hematocrit value greater than or equal to 10 g/dL or 30%, as a proxy for overtransfusion
    c. The approved changes are:
        1. Include cardiac cases (previously excluded), as both Quality Committee and Cardiac Subcommittee members determined that these measures apply to cardiac procedures
        2. "Ignore" autologous blood transfusion, as it is common and acceptable practice to administer these blood products regardless of hgb/hct values
    d. Scores for most sites increase modestly. However, several sites saw drops in performance scores for both measures, based on site cardiac cases transfusion practices.

4. TOC-02: Transfer of Care to PACU (Postop)
    a. Added 15-minute window after Anesthesia End to assess for handoff documentation
    b. Previous Measure Time Period: PACU Start to Anesthesia End

c. Current Measure Time Period: PACU Start to 15 minutes after Anesthesia En
d. Minimal score changes

13. **New Measures**
    1. [AKI-02-C](): Acute Kidney Injury, Cardiac
        a. Description: Percentage of patients undergoing an open cardiac procedure with more than 1.5x increase in baseline creatinine within postoperative days or the baseline creatinine level increases by $\geq$ 0.3 mg/dL within 48 hours postoperatively.
        b. Measure Time Period: Up to 7 days after Anesthesia End
        c. Exclusions:
            1. ASA 6 including Organ Procurement
            2. Cases where a baseline creatinine is not available within 60 days preoperatively
            3. Cases where a creatinine lab is not available within 7 postoperative days
            4. Patients with more than one case in a 7-day period. The first case will be excluded if a postop creatinine is not documented for that first case. For example, a patient that has surgery twice in a 7-day period, the first surgery is excluded if a creatinine is not drawn between cases
            5. Patients with pre-existing renal (stage 4 or 5) failure based on BSA-Indexed EGFR < 30 mL/min/1.7m^2 determined by Preop EGFR (most recent) or MPOG Complication – Acute Kidney Injury value code –2
            6. Liver Transplants
            7. Open cardiac procedures performed in conjunction with:
                1. Procedures affecting the kidney, bladder, or ureter
                    1. Anesthesia CPT and Surgical CPT codes
        d. Success:
            1. The creatinine level does not go above 1.5x the baseline creatinine within 7 days post-op.
            2. The creatinine does not increase by $\geq$ 0.3 mg/dL obtained within 48 hours after anesthesia end.
        e. We will be increasing threshold to ~30% or make it an informational measure. Threshold is on the agenda for next Cardiac Subcommittee meeting
    2. [ABX-04-C](): Antibiotic Selection for Open Cardiac Procedures
        a. Description: Percentage of adult patients undergoing open cardiac surgery with the recommended antibiotic agents administered for surgical site infection prophylaxis
        b. Measure Time Period: 120 minutes prior to Anesthesia Start through Anesthesia End
        c. Exclusions:
            1. Age < 18 years
            2. ASA 6 including Organ Procurement
            3. Patients already on scheduled antibiotics or had a documented infection prior to surgery (determined by ABX Notes value code: 2)
            4. Procedures:

1. Lung transplants, as defined by the Procedure Type: Lung Transplant phenotype
2. Non-cardiac, Transcatheter/Endovascular, EP/Cath, and Other Cardiac cases (as determined by Procedure Type: Cardiac value codes: 0, 2, 3, 4)

   d. Success: Documentation of appropriate antibiotics preoperatively or intraoperatively
   e. Acceptable Antibiotics:
      1. Vancomycin + Cephalosporin
      2. Vancomycin + Aminoglycosides
      3. Cephalosporin Only
      4. Note: Only doses administered via IV route (MPOG Concept ID: 2001) will be considered
      5. Cases will be assigned on of the following results:
         1. v Passed - Vancomycin + Cephalosporin
         2. Passed - Vancomycin + Aminoglycoside
         3. Passed - Cephalosporin Only
         4. Flagged - Non-standard antibiotic selection
         5. Flagged - Prophylactic antibiotic administered (Not documented in MAR)
         6. Flagged - Antibiotic not ordered/indicated per surgeon
         7. Flagged - Not administered for medical reasons
         8. Excluded - Scheduled antibiotics/documented infection

3. ABX-05-C: Composite Measure: Antibiotic Compliance for Open Cardiac Procedures
   a. Description:
   b. Measure Time Period:
   c. Exclusions:
   d. Success:
   e. Note: Only doses administered via IV route (MPOG Concept ID: 2001) will be considered
   f. Cases will be assigned one of the following results:
      1. Passed - Antibiotic Prophylaxis Standards Met
      2. Flagged - Timing, Re-dosing, & Section Not Met (ABX-02-C, ABX-03-C, & ABX-04-C flagged)
      3. Flagged - Timing & Selection Not Met (ABX-02-C & ABX-04-C flagged)
      4. Flagged - Re-dosing & Selection Not Met (ABX-03-C & ABX-04-C flagged)
      5. Flagged - Timing & Re-dosing (ABX-02-C & ABX-03-C flagged)
      6. Flagged - Antibiotic not administered on time (ABX-02-C flagged)
      7. Flagged - Antibiotics not appropriately re-dosed (ABX-03-C flagged)
      8. Flagged - Non-standard antibiotic selection (ABX-04-C flagged)
      9. Excluded - Scheduled antibiotics/documented infection

4. **Repository for Publications:** Coordinating Center to create a central repository for capturing non-peer-reviewed publications and newsletter types on the website.
5. **Specialty Champion Access:** Quality Champions may request full departmental access for their specialty champions (peds, cardiac, OB) to allow them to view specialty dashboards in addition to All Measure and Site Directed measure dashboards. (Specialty dashboard only view no longer available.)
6. **Sustainability measure review (2025):** Coordinating Center to form an ad hoc group to review sustainability measures

Meeting Adjourned: 10:54am

Next meeting: January 27th, 2025