Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, May 23, 2022

Attendance:

Abess, Alex (Dartmouth)	Lewandowski, Kristyn (Beaumont)
Agerson, Ashley (Spectrum)	Liu, Linda (UCSF)
Andrae, Michael (Utah)	Lopacki, Kayla (Mercy Health - Muskegon)
Applefield, Daniel (St. Joseph Oakland)	Loyd, Gary (Henry Ford)
Armstrong-Browder, Lavonda (Henry Ford WB)	Malenfant, Tiffany (MPOG)
Aziz, Mike (OHSU)	Mathis, Mike (MPOG)
Bailey, Meridith (MPOG)	McKinney, Mary (Beaumont Dearborn / Taylor)
Berndt, Brad (Borgess)	Mentz, Graciela (MPOG)
Biggs, Dan (Oklahoma)	Milliken, Christopher (Sparrow)
Boettcher, Colin (Wisconsin)	Moody, Rebecca (Beaumont)
Bollini, Mara (WUSTL)	Nanamori, Masakatsu (Henry Ford Detroit)
Buehler, Kate (MPOG)	Neuman, Drex
Clark, David (MPOG)	Nurani, Shafeena (Beaumont Troy)
Coleman, Rob (MPOG)	Owens, Wendy (MyMichigan - Midland)
Cohen, Bryan (Henry Ford - West Bloomfield)	Pace, Nathan (Utah)
Collins, Kathleen (St. Mary Mercy)	Pardo, Nichole (Beaumont)
Corpus, Charity (Beaumont Royal Oak)	Payne, Gloria (Beaumont Dearborn)
Cywinski, Jacek (Cleveland Clinic)	Perkaj, Megan (Beaumont)
Davies, Eric (Henry Ford Allegiance)	Pimental, Marc Phillip (Brigham and Women's Hospital)
Dewhirst, Bill (Dartmouth)	Ping Yu, Shao (Weill Cornell)
Doney, Allison (MGH)	Poindexter, Amy (Holland)
Drennan, Emily (Utah)	Quinn, Cheryl (St. Joseph Oakland)
Dutton, Richard	Rozek, Sandy (MPOG)
Esmail, Tariq (University Health Network)	Schultz, Kelly (St. Joseph Ann Arbor)
Everett, Lucy (MGH)	Schwerin, Denise (Bronson)
Finch, Kim (Henry Ford Detroit)	Scranton, Kathy (Mercy St. Mary)
Gall, Glenn (St. Mary Mercy Livonia)	Shah, Nirav (MPOG)
Goatley, Jackie (Michigan Medicine)	Smith, Susan (St. Joseph A2)
Hall, Meredith (Bronson)	Tao, Jing (MSKCC)
Harwood, Tim (Wake Forest)	Toonstra, Rachel (Spectrum)
Heiter, Jerri (St. Joseph A2)	Tyler, Pam (Beaumont Farmington Hills)

Horton, Brandy (A4)	Vaughn, Shelley (MPOG)
Hubbert, Kate (Holland)	Veach, Kristine (St. Joseph A2)
Johnson, Rebecca (Spectrum & Metro)	Vishneski, Susan (Wake Forest)
Kaper, Jon (Beaumont Trenton)	Woody, Nathan (UNC)
Kheterpal, Sachin (MPOG)	Wren, Jessica (Henry Ford Wyandotte/Macomb)
Koltun, Ksenia (Beaumont Royal Oak)	Zittleman, Andrew (MPOG)
Lacca, Tory (MPOG)	

Agenda & Notes

1) **Roll Call**: Will contact QI Champions and ACQRs directly to inquire about participation status if missing. Other participants can review meeting minutes and contact the Coordinating Center if they are missing from the attendance record.
2) **Minutes from February 28, 2022 meeting approved**- minutes and recording posted on the website for review
3) **Announcements & Updates**
    a) **New Executive Board Members:**
    b) **MPOG Featured Member (May - June 2022): Wes Templeton, MD - Wake Forest**
4) **Upcoming Events**
    a) Quality Committee Meetings via Zoom: 2022 calendar is posted on website
        i) ASPIRE Collaborative meeting: Friday, July 15, 2022
        ii) ASPIRE Quality Committee: Monday, July 25, 2022
    b) MPOG Upgrade Released!
5) **Subcommittee Updates**
    a) **Pediatric Subcommittee Update**
        i) Met on May 18th - 28 members attended
        ii) New Measures Released
            (1) NMB-03: Neuromuscular blockade dosing in patients < 5yo.
            (2) Pediatric Blood Management (mirror TRAN-01/02)
                (a) TRAN-03: Transfusion Vigilance, Pediatrics
                (b) TRAN-04: Overtransfusion, Pediatrics
        iii) Sustainability in Pediatric Anesthesia
            (1) Workgroup formed; First meeting discussed measure build
            (2) SUS-05: Weight based Fresh Gas Flow
            (3) SUS-06: Nitrous use during induction
        iv) Unblinded Data Review
        v) Next Meeting, August 17th
    b) **Obstetric Anesthesia Subcommittee**
        i) No update since last Quality Committee meeting
        ii) Last meeting held on February 2022: minutes available here
        iii) Next Meeting: July 20, 1pm EST
    c) **Cardiac Anesthesia Subcommittee**

i) April meeting minutes & slides available
ii) New post-bypass hypothermia avoidance measure has been released to the 'All Measures' and 'Cardiac' Dashboards
(1) TEMP-06-C: Percentage of adult patients who undergo open cardiac surgical procedures for whom the last non-artifact body temperature prior to anesthesia end was greater than or equal to 35.5 degrees Celsius. Additional measure specification details available here.
iii) A countermeasure for on-bypass hyperthermia avoidance is pending release:
(1) TEMP-07-C: Percentage of adult patients who undergo open cardiac surgical procedures requiring bypass, for whom the temperature did not rise above 37.5 degrees Celsius for over 5 consecutive minutes. Additional measure specification details available here.
iv) The next measure in development pertains to glucose management
v) Next meeting: Scheduling poll to be sent - likely August 2022

6) New Smoking Cessation Measures

a) Created for the BCBSM value-based reimbursement (VBR) program:
i) Improve smoking status documentation within 30 days prior to surgery. Target: 70%
ii) Increase the proportion of smokers who receive treatment/cessation counseling. Target: 10%
b) *Will be published & available on the dashboard by the end of June for all sites

7) Glucose Measures: Role of Continuous Glucose Monitors - Jing Tao, MD (Memorial Sloan Kettering)

a) Overview of ASPIRE Glucose measures provided
b) Continuous Glucose Monitors have continued to become more popular with 2million users in the US, 5 million worldwide
i) 2020- FDA authorized for the inpatient setting
ii) Medicare covered and some medicaid coverage
c) See presentation slides 21-26 for background on glucose continuous monitors, including case study examples
d) What are the implications for MPOG Glucose measures?
i) How are sites tracking glucose management compliance when these are used? Issues?
ii) Are nurses and providers entering the CGM data into the EHR?
iii) MPOG only receives data from the EHR from our sites. Options include:
1. Ask anesthesia providers to perform POC glucose testing (this is what typically happens at UM, but no official policy - still relatively rare)
2. The anesthesia provider enters glucose values into the anesthesia record using a newly created EHR variable (ie Home Glucose Monitor Value). We can create an MPOG concept to receive this data.
3. Document that a patient's CGM will be used to monitor glucose values during a case using a specific field in the EHR. We can map that local variable to an MPOG concept. (NOT Recommended)
4. **DISCUSSION:**
a. *Alexander Abess (Dartmouth)*: we consistently use POC
b. *Mike Aziz (OHSU*): Not sure how we could integrate continuous glucose monitor data into our EHR.

c. *Eric Davies (Henry Ford Health, Allegiance)*: Response times based on perioperative data?
    i. *Jing Tao (MSKCC)*: Thats the question going forward. There is very little CGM data in the perioperative period. Use these numbers to know when to get a POC glucose or when to confirm the patients glucose. Use the CGM as a way to direct us when to get a POC lab or not to avoid hypoglycemic episodes.
    ii. *Eric Davies (Henry Ford Health, Allegiance)*: Theres some limited data that these are accurate. Is it reasonable to treat based on the CGM value?
    iii. *Jing Tao (MSKCC)*: Access to a glucometer is the main reason most sites aren't performing well on this measure. Why not use CGM to infer on treatment?
d. *Nirav Shah (MPOG QI Director)*: Some CGM read to an app, some read to the manufacturer. When it reads to an app has that been an issue?
    i. *Jing Tao (MSKCC)*: this hasn't been an issue for us. We usually ask the patient if we can use their monitor during the case. Pediatric kids with insulin pumps they ask if the provider can use it. Patients are generally happy to give you their iphone to use for tracking.
    ii. *Eric Davies (Henry Ford Health, Allegiance)*: MPOG should start to figure out how you can collect CGM data from iphone apps to improve diabetes management. We are going to see more of these..
    iii. Nirav: Agree, this is the tip of the iceberg in regards to innovative glucose monitoring apps/devices. What are some early/basic things we can do? If your institution can build an EHR variable for CGM monitoring, MPOG can certainly create an MPOG concept to map to. Please let us know if your site is interested in doing this.
e. *Michael Andreae (Uof Utah)*: Wouldn't it be interesting to be able to follow the patient outside of the OR and collect that data through MPOG as well. Just a thought.
f. *Alexander Abess (Dartmouth) via chat:* I can see the value in MPOG sites capturing data via providers manually entering the CGM value in the electronic health record, but how would each site create a specific field for this?

8) PONV-05 Update

a) New Adult PONV prophylaxis measure released in January
    i) Upon review, sites have requested several modifications to PONV 05
    ii) Plan to retire PONV 01/02 once revised version of PONV 05 released

b) **Updates in Progress**
    i) Will now only consider actual CPT codes (not predicted) to assign procedure type risk factors (cholecystectomy, laparoscopy, gynecologic procedures)
    ii) ERCP (only) procedures will not trigger the cholecystectomy risk factor
    iii) Amulsipride will be added as an acceptable antiemetic agent

c) **Obstetric Population updates**
    i) Include all cesarean delivery cases, regardless of age
    ii) Adjust measure start time for labor epidural cases that convert to cesarean delivery: Include antiemetics given within 1-2 hours before surgery start time

d) **Add Procedure Exclusions?**
    i) TEE

(1) Quality Committee Vote:
(a) Yes (add exclusion): 33/33 100%
(b) No (0%)

ii) Endoscopy
(1) Quality Committee Vote:
(a) Yes (add exclusion for endo cases): 29/31 (94%)
(b) No (do not add exclusion): 2/30 (6%)

e) **Fentanyl as a Risk Factor?**
i) Remove intraop fentanyl as a risk factor for PONV? (only consider other "long-acting" opioids?)
ii) Or, only include intraop fentanyl administrations if they meet a certain dose threshold for the case?
iii) Or, do we continue to include fentanyl as a risk factor?
iv) Quality Committee Vote:
(1) Remove intraop fentanyl as a risk factor: 9/29 (31%)
(2) Include fentanyl administrations if they meet a certain dose threshold:14/29 (48%)
(3) Continue to include fentanyl as a risk factor (as is): 6/29 (21%)

f) **Midazolam as a Risk Factor?**
i) 4th Consensus PONV Management Guidelines do not recommend midazolam use due to possibility of sedation-related adverse effects.
ii) Meta-analysis of 12 RCTs (n=841) found administration of IV midazolam to be associated with significantly reduced PONV (Grant et al, 2016, Anesth & Analg)
iii) No significant difference in PONV between midazolam and ondansetron given 30 minutes before end of surgery (Lee et al., 2007, Anaesthesia)
iv) Quality Committee Vote:
(1) Add midazolam as an antiemetic for PONV 05?
(a) Yes (add midazolam): 9/30 (30%)
(b) No: 21/30 (70%)

g) **DISCUSSION:**
i) *Michael Andreae (Uof Utah):* Other factors for TEE/Endoscopy procedures skew the incidence of PONV for these procedures ie I don't give fentanyl for endoscopies

ii) *Marc Pimentel (BWH)*: since this is controversial, it's hard to push this measure with my colleagues; would be in favor of excluding fentanyl just to gain buy-in for this measure

iii) *Lucy Everett (MGH)*: interested in seeing the data for how many cases trigger for those low dose fentanyl cases during induction alone. if we add a threshold, will it make a difference?

iv) *Shafeena Nurani (Beaumont Troy)* via chat: Maybe we could have a threshold, like < 1mcg/kg/hour

v) *Kathleen Collins (Trinity - Livonia)*: Agree with the need for additional data. Fentanyl timing and dose should be considered for this measure. How often are cases flagged for this alone?

vi) *Tim Harwood (Wake Forest):* No one uses Midazolam as an antiemetic but do we do give it to highly anxious patients. Evidence isn't currently there so am not sure it is something we can broadly use.

h) **Conclusions:**
   i) Add a procedure exclusion for TEE
   ii) Add a procedure exclusion for endoscopy
   iii) Consider modifying intraop opioid risk factor trigger based on fentanyl intraop dose administered (dose-dependent). MPOG to pull data to assess PONV incidence at various fentanyl thresholds before modifying the measure
   iv) Add midazolam as an anti-emetic: No

Meeting concluded at 1101 EST