Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, June 25, 2018

Attendees:

Agarwala, Aalok (MGH)	Ladd, Chris (Michigan)
Angel, Alan (Bronson Battle Creek)	Louzon, Kathryn (Beaumont Royal Oak/Troy)
Bailey, Meridith (Michigan)	Mathis, Mike
Berris, Joshua (Beaumont Farmington Hills)	Malenfant, Tiffany (Beaumont Trenton/Wayne)
Biggs, Dan (Oklahoma)	Mack, Patricia (Weill Cornell)
Bledsoe, Amber (Utah)	McKinney, Mary (Beaumont Dearborn/Taylor)
Bodas, Alina (Cleveland Clinic)	Nachamie, Anna (Weill Cornell)
Brightman, Deena (Henry Ford)	Nanamori, Masakatsu (Henry Ford Detroit)
Buehler, Katie (Michigan)	Obembe, Samson (Cornell)
Chiao, Sunny (Virginia)	Paganelli, William (Vermont)
Coffman, Traci (St. Joseph A2)	Pardo, Nichole (Beaumont Grosse Pointe)
Collins, Kathleen (St. Mary)	Peterson, Tim (Sparrow)
Crawford, Joan (Mercy Muskegon)	Poindexter, Amy (Holland)
Cuff, Germaine (NYU Langone)	Poterek, Carol (Beaumont)
Cywinski, Jacek (Clevland Clinic)	Quinn, Cheryl (St. Joes Oakland)
Dubovoy, Tim (Michigan)	Rensch, Robert (Bronson Kalamazoo)
Goorin, Patricia (Sparrow)	Saager, Leif (Michigan)
Harwood, Tim (Wake Forest)	Shah, Nirav (Michigan)
Heiter, Jerri (St. Joseph A2)	Sharma, Anshuman (Wash U)
Hitti, Nicole (Weill Cornell)	Siepierski, Brooke (Metro Health)
Johnson, Ray (Beaumont)	Tollinche, Luis (Memorial Sloan)
Kennedy, Jori (Sparrow)	Tyler, Pam (Beaumont Farmington Hills)
Kamdar, Nirav (UCLA)	Valentine, Rachael (Cleveland Clniic)
Lacca, Tory (Michigan)	Vaughn, Shelley (Michigan)

Agenda & Notes

- 1. **Minutes from March 26, 2018 meeting approved** posted on the website for review. Recording available as well.
- 2. **Roll Call**: Will contact QI Champions and ACQRs directly to inquire about participation status if missing. Other participants can review meeting minutes and contact Coordinating Center if missing from attendance record.
- 3. **Upcoming Events**:
 - a. July 20 ASPIRE Collaborative Meeting Lansing, MI
 - i. New location Henry Center at Michigan State University Campus
 - ii. Keynote Speaker Dr. Jim Bagian (U of M)
 - iii. QI Stories from Michigan Sites
 - 1. Dr. Chris Wedeven Holland Hospital
 - 2. Dr. Traci Coffman Trinity Health
 - 3. Dr. William Hightower Henry Ford Health System
 - 4. Dr. Matt Price Beaumont Health

- b. October 12 MPOG Retreat/ASA Conference San Francisco
 - i. Registration is now open!
 - ii. QI Speaker Dr. Robert Wachter (UCSF)
 - iii. Data Analytics Dr. Robert Insel

4. MOCA Update

- a. Providers have a total of 18 months to complete 12 attestations
- b. Attestation is completed via the MOCA attestation button located in the feedback emails
 - i. A reminder email will be sent the 4th Friday of every month to those providers who have an outstanding attestation to complete before it expires.
- 5. **Site Updates -** Very busy with multiple sites in various stages of onboarding. MPOG is working to respond to inquiries as quickly as possible.
 - a. Sites in Progress
 - i. Beaumont Conversion to import manager and Wayne/ Trenton
 - ii. Trinity Conversion to import manager
 - iii. MD Anderson
 - iv. University of Virginia new EHR
 - v. University of California, San Francisco
 - vi. University of California, Los Angeles conversion to import manager
 - vii. University of Chicago
 - viii. Duke University
 - ix. Oregon Health Sciences University Conversion to import manager

b. Other Sites - in the queue

- i. University of Texas Southwestern
- ii. Johns Hopkins University
- iii. Penn State University
- iv. University of Maryland
- v. Montefiore Medical Center
- vi. Dartmouth Medical Center

6. QI Story - Dr. William Peterson (Sparrow Hospital - Lansing, MI)

- a. PUL-02 improvement using ASPIRE
- b. Focused on tidal volume goal of <8 and IBW and gave education to providers on where to locate IBW in Epic chart.
- c. PUL 02 improvement 67% (February 2018) \rightarrow 76% (April 2018)
- d. Implemented changes
 - i. Changed default settings on all ventilators to 400cc.
 - ii. Working with epic to have IBW more visible
 - 1. Push notifications
 - 2. Installing laminated reference cards listing IBW and tidal volume chart on ventilators as visual aid for providers.

e. Discussion

- i. Listing IBW next to height weight and name in top banner has helped some sites.
 (Dr. Berris Beaumont Farmington Hills)
- ii. Adolescent population can be a challenge, due to variation in height
- iii. Have not experienced any unintended consequences of the PUL 02 measure where cases that should have been flagged were not. *To all QC members, please reach out if with any discrepancies you find in any of the measures.

7. Measure Feedback: PONV-01 (MIPS-430)

- a. Add palonosetron to the 5HT3 antiemetic group that currently contains ondansetron, dolansetron, and granisetron
 - i. Included due to supply shortage of other anti-emetic medications at this time
- b. Add **propofol** given after induction as an anti-emetic (Proposed by Dr. Tim Harwood at Wake Forest)
- c. Add **metoclopramide** as an anti-emetic (also proposed by Dr. Tim Harwood from Wake Forest)
 - Review from 2014 co-authored by TJ Gan found that Metoclopramide is effective at 20 mg or higher as a non-sedating medication that helps to prevent PONV and quicker hospital discharge as a result.
 - ii. Metoclopramide is a weak antiemetic and at a dose of 10 mg is not effective in reducing the incidence of nausea and vomiting
 - iii. In a study with >3000 patients, metoclopramide had an antiemetic effect when given in doses larger than 20 mg.
 - iv. Metoclopramide's dose-response curve was evaluated in the presence of dexamethasone 8 mg IV administered 30 to 60 minutes before the end of surgery.
 - v. Metoclopramide in 25 and 50 mg doses had an effect similar to ondansetron 4 mg for early PONV but a smaller effect than ondansetron for late PONV.
 - vi. The NNT for metoclopramide 10, 25, and 50 mg for PONV at 24 hours is 30, 16, and 11, respectively.
 - vii. Dyskinesia or extrapyramidal symptoms were 0.3%, 0.6%, and 0.6%, respectively, and can increase with increasing metoclopramide doses.
 - viii. The NNH for extrapyramidal symptoms with the 25 or 50 mg doses is 140.35
 - ix. Discussion:
 - 1. MPOG will query to see which sites use metoclopramide preoperatively and to what extent
 - 2. Plan to provide this feedback to ASA. Need to mutually agree with ASA on this modification as this is a MIPS measure.
 - There are a lot of ways to prevent PONV that are not captured by ASPIRE.
 How does MPOG plan to capture agents given prior to anesthesia start?
 (Dr. Nirav Kamdar– UCLA)

- a. Current weakness of MPOG/ASPIRE data and is a known limitation for several existing sites.
- Implementation of new extract process (Import Manager) allows for data to be captured 4 hours before anes start and 6 hours after anes end. Capturing preop data will allow MPOG to better measure PONV 01
- 4. Dr. Harwood inquired about the standards and literature required to necessitate a change to an ASPIRE measure. To date, MPOG has not had a formal voting process to address measure changes/updates. With the proposed retiring of CARD 01, we are just now starting to institute this and plan to further define characteristics required to modify measures. Seeking guidance and recommendations from the Quality Committee on this topic.
 - a. Dr. Berris Hospitals with more 'skin in the game' financially are looking for more structured way of updating measures (Beaumont – Farmington Hills).

d. Propofol infusion

- i. Back up used for higher risk cases.
- ii. Numerous studies have demonstrated propofol has antiemetic properties.
- iii. The median plasma propofol concentration associated with an antiemetic response was 343 ng/mL, which is much lower than the concentration ranges associated with general anesthesia (3–6 mcg/mL) or sedation (1–3 mcg/mL), allowing propofol to have antiemetic properties in the subhypnotic dose range.
- iv. Propofol used as part of TIVA is recommended to reduce baseline risk for PONV. The use of propofol for induction and maintenance of anesthesia decreases the incidence of early PONV (occurring within the first 6 hours), with the NNT = 5.53
- v. The combination of propofol and air/oxygen (TIVA) reduces the PONV risk by approximately 25%
- vi. A systematic review of 58 studies demonstrated that use of propofol versus inhaled anesthesia also reduced the incidence of PDNV
- vii. The benefit of a small dose propofol infusion (bolus of 1 mg/kg followed by an infusion at 20 mcg/kg/min), either by itself or in combination with other antiemetics, has been shown to reduce PONV.

8. Measure Updates

a. CARD 01 Retirement

- i. Removed from June emails and replace with CARD 02
- ii. 26 total responded to the survey—25 yes, 1 no (out of 41 quality champions), and another 3 responded yes via email
- iii. Plan to risk adjust for CARD 02 and will relay any issues to the Quality Committee.

b. Standardized Case Duration definition across all measures for 'Provider signed in for the longest duration.'

i. Impacts the following measures: CARD 01, CARD 02, PUL 01, PUL 02, MED 01, TEMP 03, AKI 01.

ii. Case Start

- 1. Anesthesia Induction End. If not available, then
- 2. Anesthesia Induction Begin. If not available, then
- 3. Procedure Start. If not available, then
- 4. Patient in Room. If not available, then
- 5. Anesthesia Start

iii. Case End

- 1. Patient Extubated. If not available, then
- 2. Procedure End. If not available, then
- 3. Patient Out of Room. If not available, then
- 4. Anesthesia End

c. **CARD 02**

- i. For the preoperative Troponin I elevation exclusion, cases with preoperative Troponin I values with 'less than (<)' included in the result will be included up to '<0.31.' For example, preoperative Troponin I levels that are resulted as '<0.02' will be included for the measure. However, a preoperative Troponin I value of 0.02 will be excluded.
- ii. The rationale for this is each laboratory department determines the lower bound for detecting Troponin I levels accurately. This is standardized to the health system but is not standard across all participating sites.

d. PUL 01 and PUL 02

- i. Exclude periods when patients are likely spontaneously breathing (as defined by $PIP PEEP \le 6$).
- ii. For patients less than 5 feet tall, maintain the 5-foot lower limit to the IBW formula (as the Devine formula was originally intended). In other words, anyone less than 5ft is 'rounded' to 5ft.
- iii. PUL 01: Remove outpatient exclusion

e. TRAN 01 and TRAN 02

- i. Changed standard unit amount for determining massive transfusion of 4 or more units to 350mL.
 - We will now only use 350mL for sites that document blood administration in mL instead of units. No longer accepting the institution average amounts.
- ii. Dr. Berris Charting 350mL despite giving 287mL to do well with ASPIRE. Dr. Berris and Dr. Shah to discuss this further off-line to identify specific issues caused by ASPIRE now assuming 350ml = 1 unit.

9. Risk Adjustment to Dashboard

- a. Currently Added to provider emails on a quarterly basis
- b. Plan to add to ASPIRE dashboard (Institutional and provider specific dashboard)
- c. On provider tab in dashboard, plan to add columns for risk adjusted scores: Result, Actual performance, risk adjusted performance
- d. Will provide more information and examples as they become available either at the collaborative meeting in July or at the next monthly Quality Committee meeting in August.

10. Matters Arising

a. Dashboard did not refresh for 2 consecutive weeks due to measure updates and validation of changes. Measure changes are now live as of last Wedensday, June 20. Most site scores have improved. Please let the Coordinating Center (mpogquality@med.umich.edu) know if you notice any issues as a result of this update.

Meeting concluded at 10:58am