

Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, June 24, 2019

Abdallah, Arbi (Wash U St. Louis)	Louzon, Kathryn (Beaumont Royal Oak/Troy)
Applefield, Daniel (St. Joseph Oakland)	Lucier, Michelle (Henry Ford)
Angel, Alan (Bronson Battle Creek)	Mack, Patricia (Weill Cornell)
Bailey, Meridith (MPOG)	Malenfant, Tiffany (Beaumont Trenton/Wayne)
Biggs, Dan (Oklahoma)	McKinney, Mary (Beaumont Dearborn/Taylor)
Bledsoe, Amber (Univ of Utah)	Miliken, Christopher (Sparrow)
Buehler, Katie (MPOG)	Nanamori, Masakatsu (Henry Ford Detroit)
Chen, Lee-Lynn (UCSF)	Obembe, Samson (Weill Cornell)
Clark, David (MPOG)	Quinn, Cheryl (St. Joseph Oakland)
Collins, Kathleen (St. Joseph)	Poindexter, Amy (Holland)
Colquhoun, Douglas (MPOG)	Poterek, Carol (Beaumont)
Coons, Denise (Bronson)	Rensch, Robert (Beaumont Kalamazoo)
Crawford, Joan (Mercy Muskegon)	Robinowitz, David (UCSF)
Cuff, Germaine (NYU Langone)	Schmidt, Carol (Beaumont)
Diem, Oryanna (UM)	Shah, Nirav (MPOG)
Johnson, Ray (Beaumont Wayne)	Sharma, Anshuman (Wash U St. Louis)
Harwood, Tim (Wake Forest)	Smith, Susan (Beaumont)
Heiter, Jerri (St. Joseph A2)	Sherman, Jodi (Yale)
Hightower, William (Henry Ford W. Bloomfield)	Studt, Lindsay (Beaumont)
Horton, Brandy (A4)	Tollinche, Luis (MSKCC)
Kaye, Toni (ASA)	Tyler, Pam (Beaumont Farmington Hills)
Koning-Randall, Kimberly (St. Joseph)	Yu, Shao Ping (Weill Cornell)
Lacca, Tory (MPOG)	

Agenda & Notes

1. **Minutes from April 22, 2019 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 26, 2019 – ASPIRE Collaborative Meeting*
 - i. Lansing, MI
 - ii. Agenda posted
 1. Chad Brummett- Opioids in the perioperative setting
 2. Karandeep Singh- Machine Learning expert and Nephrologist from UM will discuss AKI
 3. Blinded Record Index (BRI): Plan to update collaborative on recent progress
 4. Roy Soto from MSA will present on collaborative between MSA and ASPIRE
 5. Performance review component will be ASPIRE sites only

- a. Un-blinding to see what we can learn from each other and what areas we need to improve in. Will plan to do this on an annual basis.
 - b. *October 18, 2019 – MPOG Retreat*
 - i. Orlando, Florida
 - c. Mark your calendars! Remaining Quality Committee meetings in 2019:
 - i. Monday, September 23, 2019 at 10:00 a.m. Eastern
 - ii. Monday, November 25, 2019 at 10:00 a.m. Eastern
 - iii. Submit feedback for the format of the meeting for 2020 meetings to Nirav Shah (nirshah@med.umich.edu)
- 4. **New Sites: Welcome UCSF Health! Thanks to Dr. Robinowitz for getting UCSF on-board.**
- 5. **Recruitment:**
 - a. Recruitment now complete- 6 Michigan sites have applied
 - b. New Process:
 - i. Hospital IT has received MPOG’s extract checking tool (File Checker) Checks data extract prior to loading into sites local database.
 - ii. Hospital clinical team must partake in a meeting with the Coordinating Center in June and July
 - iii. Hospital IT will send file Checker results to Coordinating Center by August 30, 2019
 - iv. ASPIRE will announce Cohort 5 sites by September 13, 2019
 - v. Hospital starts preparing for ASPIRE technical implementation September – December
 - vi. Cohort 5 sites will start technical implementation on January 6, 2020
- 6. **Data Sharing among CQIs**
 - a. We have been working on language to allow data sharing between CQIs
 - b. ASPIRE has access to complete intraoperative record for 20+ hospitals across MI; surgical CQIs collect surgical outcomes – goal is to pair this data for building better quality measures
 - c. ASPIRE has included the following CQIs in our Data Use Agreement amendment:
 - i. MTQIP (Michigan Trauma Quality Improvement Program)
 - ii. MUSIC (Michigan Urological Surgery Improvement Collaborative)
 - iii. MARCQI (Michigan Arthroplasty Registry Collaborative Quality Initiative)
 - iv. BMC2 (Blue Cross Blue Shield of Michigan Cardiovascular Consortium)
 - v. MSTCVS (Michigan Society of Thoracic and Cardiovascular Surgery)
 - vi. MBSC (Michigan Bariatric Surgery Collaborative)
 - vii. MSSIC (Michigan Spine Surgery Improvement Collaborative)
 - d. Each Michigan hospital will have to sign the DUA amendment to give permission to share data
 - e. Example: Can take SSI outcomes data from each collaborative to populate an SSI outcomes measure

- f. **Whoever signed original DUA from the hospital should also sign this amended version- typically someone from the compliance or legal department at the hospital**

7. **Measure Updates**

a. **TEMP 03** – Change to 36.0

- i. Built to match MIPS 424. No longer have that obligation with withdrawal from QCDR
- ii. Changed measure success from 35.5 to 36.0
- iii. Most site scores stable
- iv. P4P will use original TEMP 03 specs

b. **PONV 03**

- i. PONV 03 identifies the percentage of patients who undergo a surgical procedure and experience postoperative nausea/emesis.
- ii. The purpose of this outcome measure is to identify the incidence of postoperative nausea and vomiting in surgical patients.
- iii. Postoperative nausea and vomiting is defined as any documented nausea, vomiting/retching or antiemetic administration in the PACU electronic health record.
- iv. **Inclusions:** All patients, regardless of age, who undergo any procedure including surgical, therapeutic, or diagnostic requiring care by anesthesia providers.
- v. **Exclusions:**
 - 1. Patients transferred directly to the ICU
 - 2. Patients who remain intubated
 - 3. Labor Epidurals (CPT: 01967)
 - 4. Obstetric Non-Operative Procedure Rooms (Rooms tagged as OB-GYN – Labor and Delivery)
 - 5. Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”
- vi. **Success:** Patient does not report nausea, have an emesis event or receive an antiemetic during the immediate postoperative period.
- vii. **Threshold:** Inverse display on the dashboard
- viii. **Responsible Provider:** Provider(s) signed in for longest duration of case
- ix. Coordinating Center will post draft measure spec for PONV 03 to the forum for additional feedback
- x. Question from Germaine Cuff (NYU): Exclude anti-emetics administered 30 minutes before discharge from PACU for outpatient surgery patients (given as prophylaxis for ride home)

c. **SUS 01**

- i. Percentage of cases with mean fresh gas flow (FGF) equal to, or less than 3L/min, during administration of halogenated hydrocarbons and/or nitrous oxide.
- ii. SUS 01 measures Fresh Gas Flow (FGF) during administration of halogenated hydrocarbons and/or nitrous oxide, as an indirect measure of anesthetic gas waste.
- iii. This measure looks at the maintenance period of anesthesia, defined as the time between placement of an endotracheal tube or supraglottic airway and removal of the endotracheal tube or supraglottic airway. This measure will exclude pre-oxygenation (before placement of the airway device) and emergence defined as

the time when the fraction of inspired halogenated hydrocarbons and nitrous oxide is 0.

- iv. **Inclusions:** Patients administered halogenated hydrocarbons and/or nitrous oxide, for greater than or equal to 30 minutes from placement of the airway device to removal of the airway device.
- v. **Exclusions:**
 - 1. Cases in which halogenated hydrocarbons and nitrous oxide are NOT used
 - 2. Cases with maintenance period < 30 minutes
 - 3. Cases with >20% of Fresh Gas Flow values manually entered during the case (automated capture of FGF required)
- vi. **Responsible Provider(s):** All providers signed in for at least 30 minutes during the maintenance period of anesthesia (intubation to extubation).
- vii. **Method for determining Responsible Provider:** All providers signed in while patients are administered halogenated hydrocarbons, and/or nitrous oxide, for more than, or equal to, 30 minutes from placement of the airway device to removal of the airway device. See 'Other Measure Build Details' section for algorithm for determining measure start and end times.
- viii. Questions for Quality Committee:
 - 1. Will use % inspired MPOG concepts for halogenated agents and nitrous (not expired versions of the agents). So if a site only documented/mapped to the expired concept, they would be excluded from the measure for all cases.
 - a. David Robinowitz (UCSF): Recommendation to capture set concentrations of vaporizer instead of inspired % due to time lag between change vaporizer setting to inspired % captured by gas analyzer.
 - b. Anshuman Sharma (Wash U): Recommendation to assume vaporizer set as zero when expired>inspired %.
 - c. Coordinating Center recommends to continue case review of the measure using inspired % initially since most sites consistently document this and the goal is to include as many sites as possible and increase overall awareness. As data capture issues arise, will identify a pragmatic way to move forward to increase accuracy.
 - 2. To determine Measure Start, we've used the following algorithm:
 - a. Placement of endotracheal tube, or supraglottic airway (LMA, COPA), if not available
 - b. Anesthesia Induction End, If not available, then
 - c. Anesthesia Induction Start. If not available, then
 - d. Procedure Start. If not available, then
 - e. Patient in Room. If not available, then
 - f. Anesthesia Start
 - 3. Should the measure account for the time before induction or the time after extubation to attempt to capture excess flow situations when the agent/flows are left on accidentally?
 - a. Dr. Anshuman Sharma (WashU): Recommends that ASPIRE captures the scenarios when agents/flows are left on

accidentally as this seems plausible for patients transferred to ICU

4. For cases with >30 minutes of high flow during maintenance, but no single provider was signed in for 30 minutes, we are including as an institutional fail but excluding from attribution

d. **CARD 02**

- i. Looks at Troponin values greater than 0.6 ng/mL
- ii. Very low rates of incidence across MPOG- sites using ASPIRE data to review failures and determine implications for anesthesia QI
- iii. More sites moving towards high sensitivity Troponin T (pg/mL)
- iv. Would like to include cases with hs Troponin T in CARDS 02, but data on “equivalence” between hs Troponin T and Troponin I is lacking
- v. “Although correlation isn’t perfect, an hs-Trop T measurement of 30 pg/ml roughly correlates with the initial detectable level of our old Trop I assay (just above 0.1 ng/ml). An hs-Trop T of 140 pg/ml roughly correlates with an old Trop I value of 1.0 ng/ml.”
- vi. **[(Troponin I) * 122.2] + 17.7 = [hs-Troponin T]**
- vii. A Troponin I of .6, is roughly equal to hs-Troponin T ~91 pg/mL
- viii. Coordinating Center would like to move forward with incorporating Troponin T in CARD 02- will post to the forum to receive feedback from collaborative

8. Provider Feedback Study

- a. Current Email design is approximately 4 years old
- b. Plan is to revise email- Zach Landis-Lewis, Ph.D (University of Michigan) would like to use ASPIRE infrastructure to study provider feedback to see how we can improve our email design.
- c. Dr. Landis-Lewis will also submit this as a grant as part of a research project
- d. Would like to interview Quality Champions and providers to receive feedback about current design- Dr. Landis-Lewis will be at the July meeting to have these discussions

9. Sponsored measure validation analysis

- a. MPOG receives funding from a variety of sources
 - i. Research: NIH, and other industry sources, sites
 - ii. Quality: BCBSM, sites
- b. Starting to receive interest from other QI shops to conduct measure validation analysis
- c. Currently discussing project with Mathematica to conduct analysis on a new hypotension measure
- d. All analysis and data stays within UM firewall. Sponsor receives analysis results
- e. Can help MPOG understand what would happen if we updated BP 01
- f. Will only use data from a couple of sites, and will ask for permission from site Quality Champions if we do
- g. Provide feedback via email to ASPIRE Director, Nirav Shah (nirshah@med.umich.edu)

Meeting concluded at 11:00am