Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, April 27, 2020

Abess, Alex (Dartmouth)	Lacca, Tory (MPOG)
Applefield, Daniel (St. Joseph Oakland)	Lagasse, Bob (Yale)
Bailey, Meridith (MPOG)	LaGorio, John (Mercy Muskegon)
Berndt, Bradford (Bronson)	Lewandowski, Kristyn (Beaumont Royal Oak)
Berris, Josh (Beaumont)	Lins, Steve (Bronson)
Biggs, Dan (Oklahoma)	Loyd, Gary (Henry Ford)
Bollini, Mara (WUSTL)	Lucier, Michelle (Henry Ford)
Boutin, Jimmy (Henry Ford)	Malenfant, Tiffany (Beaumont Trenton/Wayne)
Bouwhuis, Alex (Holland)	Miliken, Chris (Sparrow)
Buehler, Kate (MPOG)	Obembe, Samson (Weill Cornell)
Chiao, Sunny (UVA)	Onyewuche, Vivian (Henry Ford)
Clark, David (MPOG)	Pardo, Nichole (Beaumont)
Collins, Kathleen (St. Joseph)	Poindexter, Amy (Holland)
Coons, Denise (St. Joseph Oakland)	Poterek, Carol (Beaumont)
Davis, Quinten (Mercy Muskegon)	Rubin, Daniel (Chicago)
Dewhirst, William (Dartmouth)	Ruiz, Joseph (MD Anderson CC)
Domino, Karen (Washington)	Saffary, Roya (Stanford)
Drolett, Colleen (Henry Ford)	Schonberger, Rob (Yale)
Grandinetti, Amanda (ASA)	Shah, Nirav (MPOG)
Gottlieb, Ori (Chicago)	Shebbo, Fadia (American University of Beirut Medical Center)
Hall, Kathleen (Borgess)	Straight, Lindsay (MidMichigan)
Harwood, Tim (Wake Forest)	Szymanski, Brooke (MPOG)
Heiter, Jerri (St. Joseph A2)	Trummel, John (Dartmouth)
Hightower, William (Henry Ford)	Tyler, Pam (Beaumont Farmington Hills)
Horton, Brandy (St. Joes Oakland)	Wren, Jessica (Henry Ford Wyandotte/Macomb)
Jiang, Silis (Weill Cornell)	Yu, Shao Ping (Weill Cornell)
Kurz, Andrea (Cleveland Clinic)	

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 Coordinating Center if missing from attendance record.
2. **Minutes from February 24, 2020 meeting approved**- posted on the website for review. Recording available as well.
3. **COVID-19:** Thank you to all sites for the work you have been doing during this time
4. **Upcoming Events**
    a. 2020 Quality Committee Meetings
        i. June 22, 2020 @ 10am EST
        ii. August 24, 2020 @ 10am EST
        iii. October 26, 2020 @ 10am EST
    b. ASPIRE/MSQC Meeting March 27, 2020 –
        i. Thanks to our invited speakers

1. Dr. Tom Varghese (University of Utah)
2. Dr. Daniel Clauw (Michigan Medicine)
3. Dr. Eve Kerr (Michigan Medicine)

c. ASPIRE Summer Meeting July 17, 2020
   i. Mark your calendars and keep your fingers crossed!
   ii. Keeping options open for potential virtual meeting

5. **Announcements**
   a. Welcome University of Chicago Medicine as our newest active MPOG site!
   b. Dr. Lee Fleisher, Department chair at Penn Medicine is the MPOG Featured Member for March/April 2020.
   c. The MPOG Approach to Research and Quality Improvement featured in Anesthesia & Analgesia – Congratulations Dr. Douglas Colquhoun et al, from the MPOG coordinating center!
      i. Outlines the work that MPOG does and how it is done. Now available to site in future publications when using MPOG data for quality and research.
6. **April 2020 Upgrade/Application Updates**
   a. MPOG Database and Application Suite Upgrade now available!
   b. Release Notes available on the MPOG website
   c. Contact support@mpog.zendesk.com for details or to confirm that your site completed the upgrade successfully
   d. Case Viewer
      i. Original Case Viewer officially retired – replaced by new Case Viewer
      ii. *NEW* Case Viewer User Guide available on the MPOG website
      iii. Copy buttons for MPOG Case ID & MRN reinstated, added patient age filter on the Case Search page, notes section opens on the right side by default when you open a case now, date of death displays in banner, if available.
   e. Case Validation
      i. Sections were reordered by topic to assist case reviewers
      ii. Question removed: general anesthesia & preop medication questions
      iii. Revised neuraxial/regional question
   f. Data Diagnostics
      i. Added free text search filter
      ii. Updated aesthetic - vertical guide allows for easier data point selection.
      iii. “Diagnostic Executed On” now includes time.
   g. Import Manager Assistant
      i. Additional filters to sort by AIMS source system and module columns
      ii. Months with partial data are now indicated with a half green/half gray box
   h. **Dashboard 2.0 - Release by end of May**
      i. Can use alongside the existing dashboard
      ii. New dashboard is more data driven
      iii. Individual sites will be able to have multiple dashboards and can organize by what measures are of current focus, peds subgroup, OB subgroup specific etc.

iv. Measure Detail screens will provide same trend and benchmarking information
    1. Will include more visual representation breakdown of measure performance
    2. Improvements to the filter section
v. Plan to retire old dashboard by MPOG retreat in October by ASA

7. **MPOG Pediatric Anesthesia Subcommittee**
    a. Peds group met on April 21, 2020
    b. 30 Pediatric Anesthesiologists were in attendance
    c. Partnering with SPA Q&S Workgroup, established to inform the MPOG pediatric subcommittee of best practices in pediatric anesthesia. First meeting October 2020 at ASA-Washington, D.C.
        i. Liaisons: Brad Taicher (Duke) and Vikas O'Reilly-Shah (Seattle Children's)
    d. UM Peds Quality Champion – Bishr Haydar and Lisa Vitale
    e. **Temperature Management Measure Criteria Confirmed (TEMP-04-Peds)**
        i. Description: Percentage of patients < 18 years old who undergo any procedure greater than 30 minutes whom have a median core temperature < 36°C (96.8°F) or nadir temp < 35°C (95°F) intraoperatively.
        ii. Measure Time Period: Patient in Room → Patient out of Room
        iii. Exclusions
            1. Cases < 30 minutes duration
            2. MAC/Sedation Cases
            3. Cases without documentation of a core or near core temperature route
            4. ASA 5 and 6
            5. Cardiac Surgery
    f. Peds Opioid Equivalency Specification
        i. Adding Tonsillectomy and/or Adenoidectomy for pediatric patients < 18yo
        ii. Cases included: CPT code 00170 and with procedure text 'tonsil' and/or 'adenoid'

8. **MPOG Obstetric Anesthesia Subcommittee**
    a. Last meeting was on March 17, 2020
        i. Decision to proceed with ABX 01 (OB): Antibiotic Timing for Cesarean Deliveries
            1. Anticipated release: May 2020
        ii. Discussion on BP 04 (OB): Prolonged Hypotension for Cesarean Deliveries
            1. Committee able to reach consensus on initial measure build
            2. Measure specification in progress
    b. BP-04-OB: Hypotension during Cesarean Deliveries
        i. **Description:**
            1. Total cumulative minutes of hypotension <u>after spinal placement</u>
            2. Total cumulative minutes of hypotension will be resulted for two time periods: spinal placement to delivery and delivery through anesthesia end
            3. For patients with pre-eclampsia, hypotension is defined as >20% decline from baseline systolic blood pressure

4. For patients without pre-eclampsia, hypotension is defined as SBP<90mmHg

ii. **Inclusions:**
1. All cesarean deliveries (Determined using the MPOG Obstetric Anesthesia Type phenotype) with neuraxial anesthesia only
2. Patients undergoing cesarean section with hysterectomy (CPT: 01969)

iii. **Exclusions:**
1. Cesarean delivery with general anesthesia only (without neuraxial anesthesia)- determined using Anesthesia Technique-Neuraxial MPOG phenotype
2. Emergency cesarean delivery with diagnosis of placental abruption (ICD-10: O45*)
3. Rupture of uterus (spontaneous) before onset of labor (ICD-10: O71.0)
4. Newborn affected by intrauterine blood loss from ruptured cord (ICD-10: P50.1)
5. Abnormal uterine or vaginal bleeding, unspecified (ICD-10: N93.9)
6. Placenta previa with hemorrhage, third trimester (ICD-10: O44.13)
7. Hemorrhage from placenta previa, antepartum condition or complication (ICD-10: 641.13)
8. Hemorrhage from placenta previa, delivered, with or without mention of antepartum condition (ICD-10: 641.11)

9. **Cardiac Subcommittee Proposal**
   a. Many current ASPIRE measures either exclude cardiac cases or do not incorporate cardiac-specific factors
   b. We have brainstormed about potential cardiac ASPIRE measures but want more input from the group
   c. Please join the Cardiac Subcommittee! Contact Allison Janda (ajanda@med.umich.edu) or Nirav (nirshah@med.umich.edu) if you wish to participate
10. **Measure Updates**
   a. Surgical Site Infection Measure (SSI 01)
      i. Includes only cases that were present in both the MSQC and ASPIRE registries (denominator)
      ii. Displays surgical site infection data (superficial, deep, organ space, and ALL)
      iii. Using MSQC sample of cases
      iv. SSI data abstracted by nurse abstractors in each participating site
      v. Will display the previous 12-month trend over time including risk-adjusted and non risk-adjusted rates
      vi. Refreshed quarterly (based on data integration schedule with MSQC)
      vii. Ability to filter by surgical procedure (MSQC covers general surgery, vascular surgery, and hysterectomy)
         1. Limited to cases that are sampled only for the above listed surgical services.

viii. Available at institution level only initially (not on provider emails)
ix. Good Opportunity for Quality Champions to review with ASPIRE process measures affecting surgical site infections
x. Can enable for sites submitting NSQIP data at quarterly intervals.
    1. NSQIP data dictionary is very similar to MSQC data dictionary and so the ability to match cases from NSQIP is there.
    2. If interested, we recommend reaching out to your surgical champion locally to discuss submitting registry data to MPOG.

b. **In Hospital Mortality (MORT 01)**
    i. Have used in hospital mortality data in research previously and may be relevant from a QI perspective as well.
    ii. Finalizing the specification currently and will post for feedback prior to publishing.
    iii. Description:
        1. Percentage of patients where inpatient death was reported within 30 days after anesthesia
        2. Post Anesthesia Mortality Rate:

$$\frac{\text{\# of cases where pt died within 30 days (exclude subsequent cases, only count one case per pt)}}{\text{total \# of cases performed}}$$

    iv. Inclusions:
        1. All patients undergoing anesthesia
    v. Exclusions:
        1. ASA 6
        2. Anesthesia for access to central venous circulation (00536)
        3. Diagnostic imaging
    vi. Responsible Provider: No provider attribution

11. **Measure Discussion**
    a. **Glucose Management**
        i. Glucose 03 (perioperative hyperglycemia treated or rechecked) and Glucose 04 (perioperative hypoglycemia treated or rechecked) were introduced at the last Quality Committee meeting and rolled out to institution level dashboards only
        ii. Originally built with no provider attribution. After single center review, the necessity for alerting providers on flagged GLU 03/04 cases was clear.
        iii. Proposed provider notification strategy
            1. For cases that were flagged for GLU 03/04, notification would go to the provider signed in at the start of the case
            2. For cases that were flagged intraoperatively, attribution would follow GLU 01/02 model
            3. For cases that were flagged postoperatively, notification would go to the provider signed in at the end of the case

iv. *Lucy Everett (Massachusetts General Hospital)* – makes sense to attribute provider intraop and postop but not preop. May see push back from providers on preop attribution. Hypoglycemia is rare enough that review would occur at the departmental level.

v. *Nirav Shah (University of Michigan)* – provider attribution for the GLU 01 and GLU 02 is the provider signed in at the time the glucose lab re-check or treatment should have taken place.

1. *Josh Berris (Beaumont Farmington Hills)* – Would preop attribution be the first person starting the case? What about the provider who signed the PACU discharge?

a. *Nirav Shah (University of Michigan)* Yes, preop attribution would go to providers signed in at the start of the case. For cases flagged in the PACU, the attribution would go to provider signed in at the end of the case. Interesting thought on using the PACU discharge note which we can look at. Working to balance on whether we should leave at the institutional level or add provider notification.

b. **Proposed Glycemic management measure (GLU-05)**

i. **Description:** Percentage of cases with intraoperative glucose > 180 mg/dL with administration of insulin within 60 minutes of original glucose measurement

ii. **Inclusions:**

1. All patients with glucose level greater than 180 mg/dL between Anesthesia Start and Anesthesia End

iii. **Exclusions:**

1. ASA 5 and 6 cases
2. Patients < 12 years of age.
3. Glucose measurements > 180 mg/dL within 60 minutes before Anesthesia End
4. Outpatient cases with Anesthesia Start to Anesthesia end time less than 4 hours long
5. Obstetric Non-Operative Procedures- CPT 01958, 01960, 01967
6. Obstetric Non-Operative Procedures with procedure text: “Labor Epidural”

iv. **Responsible Provider:** The provider signed in at the first administration of insulin. If no insulin administration occurred, then the responsible provider is the one signed in 60 minutes after the high glucose measurement.

c. **Feedback Requested**

i. Does it make sense to separate glucose checking from hyperglycemia treatment measures?

1. Ori Gottlieb (UChicago Medicine) – Is there a measure to see if another glucose is checked elsewhere.

    a. *Nirav Shah (University of Michigan)* In previous glucose measures we have defined success as if the provider had administered insulin OR re-checked the blood sugar. If its trending downward, maybe that is what we should look at rather than checking. Current glucose measures refer to treatment or lab re-checks. There is an opportunity to shift the focus of these measures to targeting the appropriate blood glucose level and inform on best practice of glucose management.

2. *William Hightower (Henry Ford Health System – West Bloomfield)* GLU 01/02 performance at our institution is influenced by surgical patients with really well managed diabetes OR if providers are not checking a glucose intraoperatively. It would be interesting to see how many diabetics in general had their glucose checked intraop and if checks were being done in PACU.
    a. *Nirav Shah (University of Michigan)* Interesting point! This leads to another measure that may be more applicable and could focus on if we are checking glucose in preop and PACU on the right cohort of patients (diabetes, high risk surgery etc). Agree - GLU 01/02 denominators are really low and we may not be checking enough in preop.

Meeting concluded at 11:02am