Anesthesiology Performance Improvement and Reporting Exchange (ASPIRE)

Quality Committee Meeting Notes – Monday, July 26, 2021

Attendance:

Abess, Alex (Dartmouth)	Lacca, Tory (MPOG)
Agerson, Ashley (Spectrum)	Lewandowski, Kristyn (Beaumont)
Angel, Alan (Bronson Battle Creek)	Lins, Steve (Bronson)
Applefield, Daniel (St. Joseph Oakland)	Lockwood, Holly (Henry Ford Allegiance)
Bailey, Meridith (MPOG)	Loyd, Gary (Henry Ford)
Berndt, Brad (Borgess)	Lu-Boettcher, Eva (Wisconsin)
Biggs, Dan (Oklahoma)	Malenfant, Tiffany (MPOG)
Bollini, Mara (Washington University)	Mango, Scott (MidMichigan Midland)
Bouwhuis, Alex (Holland)	Mathis, Mike (MPOG)
Brydges, Garry (MD Anderson)	McKinney, Mary (Beaumont Dearborn / Taylor)
Buehler, Kate (MPOG)	Milliken, Christopher (Sparrow)
Charette, Kristin (Dartmouth)	Mockridge, Stacy (Metro)
Clark, David (MPOG)	Mongan, Paul (Florida)
Cohen, Bryan (Henry Ford Detroit)	Nanamori, Masakatsu (Henry Ford Detroit)
Coleman, Rob (MPOG)	O'Reilly-Shah, Vikas (UW)
Cuff, Germaine (NYU Langone)	Overmyer, Colleen (UChicago)
Cywinski, Jacek (Cleveland Clinic)	Owens, Wendy (MidMichigan - Midland)
Davis, Quinten (Mercy Muskegon)	Pace, Nathan (Utah)
Davies, Eric (HF Allegiance)	Pardo, Nichole (Beaumont)
Deiner, Stacie (Dartmouth)	Pichurko, Adrian (UW)
Dewhirst, Bill (Dartmouth)	Poindexter, Amy (Holland)
Drennan, Emily (University of Utah)	Qazi, Aisha (Beaumont Troy)
Durand-Boettcher, Colin (Wisconsin)	Quinn, Cheryl (St. Joseph Oakland)
Everett, Lucy (MGH)	Riggar, Ronnie (MPOG)
Fisher, Garrett (MidMichigan)	Ruiz, Joseph (MD Anderson)
Goatley, Jackie (Michigan Medicine)	Rutherford, Renee (Borgess)
Gonzalez, Alex (NYU Langone)	Saffary, Roya (Stanford)
Hage, Phillip (Metro)	Schonberger, Rob (Yale)
Hall, Kathleen (Borgess)	Scranton, Kathy (Mercy St. Mary)
Harwood, Timothy (Wake Forest)	Schwerin, Denise (Bronson)
Heiter, Jerri (St. Joseph A2)	Shah, Nirav (MPOG)
Horton, Brandy (A4)	Smith, Susan (St Joes)

Hurwitz, Rachel (MPOG)	Szymanski-Bogart, Brooke (MPOG)
Jiang, Silis (MGH)	Tao, Jing (MSKCC)
Johnson, Rebecca (Spectrum & Metro)	Tyler, Pam (Beaumont Farmington Hills)
Kaper, Jonathan (Beaumont Trenton)	Vaughn, Shelley (MPOG)
Kenron, Dan (OHSU)	Wren, Jessica (Henry Ford Wyandotte/Macomb)
Koltun, Ksenia (Beaumont Royal Oak)	Zittleman, Andrew (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 May 24, 2021 meeting approved**- minutes and recording posted on the website for review
3) **Announcements & Updates**
    a) Featured Member July and August 2021 – Dr. Jonathan Wanderer - Vanderbilt
    b) New team members:
        i) Rachel Hurwitz, MPOG Research Assistant
        ii) Ronnie Riggar, MPOG Administrative Assistant
        iii) Tiffany Malenfant, MPOG Clinical Informatics Specialist
        iv) Andrew Zittleman, MPOG Clinical Informatics Specialist
4) **Upcoming Events**
    a) MPOG Retreat: October 8, 2021
        i) Manchester Grand Hyatt, San Diego, California
    b) Quality Committee Meetings via Zoom
        i) Monday, September 27, 2021
        ii) Monday, November 22, 2021
5) **Review of July ASPIRE Collaborative Meeting (see MPOG website for post meeting information)**
    a) Reflections and Lessons Learned on Quality Improvement
        i) TEMP 02: Holly Lockwood, BSN, MBA - Henry Ford Allegiance
        ii) GLU 03: Dr. Merajuddin Khan - Henry Ford Macomb
        iii) SUS 01: Dr. Jimmy Boutin - Henry Ford Wyandotte
    b) Postpartum Hemorrhage: Diagnosis, Treatment and the Michigan Approach - Dr. Tom Klumpner
    c) OB Panel - Drs. Angel Martino-Horrall and Josh Younger
    d) Healthy Behavior Optimization for Michigan (HBOM)
6) **QI Reporting Tool**
    a) Coordinating Center still working out slowness issues
    b) We have not been able to retire old dashboard yet
    c) Will resolve as soon as possible
7) **ASPIRE for Better Geriatric Care - Germaine Cuff, PhD - NYU Langone**
    a) Mission: To arm anesthesiologists and other clinicians involved in preoperative care, as well as hospitals, patients, and their families caring for older surgical patients with the tools and research. Collaborating effort: ASA - Brain Health Initiatives

b) Suggested Measures
   i) Percentage of patients >80 undergoing non-cardiac GA who received benzodiazepine from anesthesia start to anesthesia end
   ii) Percentage of patients >80 undergoing GA with ETT who received more than 1.5mg/kg of single propofol dose for induction
   iii) Percentage of patients age >65 without preoperative hypertension undergoing GA for non-cardiac surgery who had episodes of MAP<55mmHG within 15-minutes of induction
   iv) The use of rescue Sugammadex following full reversal by neo/glycol
c) Discussion
   i) Stacie Deiner (Dartmouth): Thought about contraindicated medications?
   ii) Germaine Cuff: We want to start with medication that are measurable
   iii) Stacie Deiner:
      (1) Meds used commonly include ketamine and gabapentin
      (2) There is a list assembled by Geriatrics Society and updated every year that gives recommendations for medications for geriatric patients
   iv) Mike Mathis (MPOG): start with low hanging fruit and then stage it to include more medications. Beers Criteria here: https://geriatricscareonline.org/ProductAbstract/american-geriatrics-society-updated-beers-criteria-for-potentially-inappropriate-medication-use-in-older-adults/CL001
   v) Eric Davies (Henry Ford Allegiance): My concern is that once you set up an ASPIRE measure then you will not get anyone to use benzodiazepine for anyone over 80 and not sure if this is good care.
   vi) Stacie Deiner:. The downside of delirium may outweigh the anti anxiety
   vii) Nirav Shah: The thought behind these measures is to develop an institutional measure, without provider attribution. This will allow Quality Champions to delve into practice a little more and determine when it may be appropriate to use certain medications.
   viii) Eric Davies: great points and you addressed my concerns.
   ix) Germaine Cuff: this is on the list for the Geriatrics Society Panel and recommendations may not be available for a year and this is an opportunity for us to start this process through MPOG.
   x) Tim Harwood (Wake Forest): How many sites are using frailty index preoperatively? We have an internal one but would like to know if there is a standard model. Have heard of some but not a standard.
   xi) Mike Mathis: We need to choose one that can be used with MPOG data.
   xii) Alex Abess (Dartmouth): There is heterogeneity in frailty index tools and we can identify the top five or six being used. Regarding Sugammadex: Are you assessing whether the patient is fully reversed? I think there is still institutional pharmacy pushback to not use sugammadex.
   xiii) Dr. Biggs (Oklahoma): We have push-back from our pharmacy not to use Sugammadex.
   xiv) Nirav Shah: MPOG has data on variation of Sugammadex usage across sites and if you need it to help lift institutional restrictions, we would be happy to share

xv) Mike Mathis: Going back to Eric's comment to address that people will avoid using benzodiazepines. This can be avoided through education. We don't want to incentivize people not to use a specific drug in practice.

xvi) Rob Schonberger (Yale): What type of hypotension should be flagged and should there be an age restriction? About 20% of the people who are getting GA are getting a MAP 55mmHg within 15-minutes of induction. We need better data to define if it's a bad thing for the patients. We should be working to prevent this occurrence.

xvii) Tao (MSKCC): Depth of anesthesia has an impact on hypertension. Are we thinking of measuring the anesthesia depth?

xviii) Mathis: Agree w/ Germaine -- get a foothold first, then push further, based on lessons learned from developing measure in the smaller group

xix) Emily Drennan (Utah): Via Chat: Why is the benzo measure only over age 80?

xx) Germaine Cuff: Via Chat: @Emily I think we are starting small so as not to take away a clinicians ability to use benzos - I agree it should be a lower age, but we have to start somewhere

xxi) Alex Abess: Via Chat: Rob - to your comment about asking folks about time duration of MAP < 55, my thought would be maybe 5 min or some duration beyond just a single BP measurement

8) MPOG Delirium Data

a) UCSF, Dartmouth-Hitchcock, and other sites have expressed interest in using MPOG data to evaluate cognitive function and postoperative delirium

b) Ad hoc group met to discuss goals of the work and limitations of the data

c) MPOG data analyzed through variable mapping spreadsheets and common unmapped variables across sites summarized

d) New MPOG concepts associated with delirium as needed

e) New concepts related to preoperative screening

i) Mini Mental Status exam

ii) Preoperative Screening - mini cognition

iii) Montreal cognitive assessment

iv) postoperative assessment - CAM

v) Cornell Assessment Pediatric Delirium

vi) AWOL-S, AD8, 4AT

f) Next Steps

i) Consider incorporating these assessments into practice

ii) Analyze concept fill rates (Coordinating Center)

iii) Information Measure (MPOG QC)

iv) Research Project includes surveys, observational analyses, etc (PCRC)

v) Quality Improvement Initiatives

g) Alex Abess: One thing to consider is the consensus across the centers. Leverage MPOG to create a tool to make everyone's life easier. Sites may benefit from MPOG taking the lead with EHR vendors

h) Tim Harwood: There are several sites building something into their EHR. We do mini COG occasionally but it's difficult to track. Iowa validated internally.

i) Germaine Cuff: Mini Cog and 3D CAM are used sporadically at NYU
j) Lucy Everett: I Chair the Epic Anesthesia Advisory Board and we are talking about frailty scores and Epic is interested and willing but may run into copyright issues. Lucy will send information offline.

9) Standardized Data File - Dr. Mike Mathis - MPOG

a) Adjusting QI/Research passion to data available in MPOG
   i) DataDirect Self-serve access for local data and multicenter cohort ID maturing
b) Postoperative outcome data limited to morality ICD10, discharge diagnosis, lab results
   i) New outcome measure (LOS); data validation robust and continual through WI reviews
c) Understanding what is and what is not possible with MPOG data
   i) Hundreds of patient, process, and outcome phenotypes available
d) Iterative, detailed data query specification and query process
   i) Maintenance of QI measures through regular reviews
e) Time between ideation to data ready for analysis can be many months
f) Data common to many different QI and research projects
   i) Created all these phenotypes taking raw data sources and combining them through a hierarchy and we saved them to re-use them on new research / QI measures.
g) Combine the building blocks into a usable product
h) Standardize data file composed of mature phenotypes
i) Release every 6 - 12 months
j) Patient and providers remain anonymized
k) Standardized data spec
   i) Single Center and provider IDS
   ii) ASPIRE Quality Metrics - take process of care data and associate them with ASPIRE Quality Measures.
   iii) Goal is to release the files by November and will only be available to participating sites
l) Kate Buehler via chat: https://phenotypes.mpog.org/Length%20of%20Stay%20After%20Procedure%20(Days)

10) Measure Updates and Feedback

a) PAIN 01 and 02 Provider Attribution Proposal
   i) PAIN 01: Administration of non-opioid adjuncts in pediatric population
   ii) PAIN 02: Administration of non-opioid adjuncts in adult population
      (1) Responsible Provider:
         (a) **Option 1**: Providers signed into the case at induction
         (b) **Option 2**: Providers signed into the case for longest duration
         (c) **Option 3**: Providers signed into case at emergence
         (d) **Option 4**: All of the above
         (e) **Option 5**: Continue with no provider attribution
      (2) We will decide with ranked choice voting to be sent after meeting
b) GLU 03/04/05: Provider Attribution added
   i) GLU 03 - hyperglycemia managed by Insulin recheck of glucose
   ii) GLU 04 - Hypoglycemia managed by dextrose or recheck of glucose
   iii) GLU 05 - Management of Hyperglycemia with Insulin

(1) Responsible Provider:
    (a) **Preop Time Period** (preop start through anesthesia start): First providers signed into the case
    (b) **Intraop Time Period**: The provider signed in at the first glucose recheck or first administration of insulin/dextrose. If neither occured, then the responsible provider is the one signed in 90 minutes after high glucose measurement
    (c) **Postop Time Period**: (anesthesia end through PACU end): The last providers signed into the case

iv) GLU 03/04 Bug
    (1) Error uncovered that was causing the measures to exclude high/low glucose values at the beginning (preop) and end (PACU) of the measurement period.
    (2) Resolving this error has resulted in the change in score performance for some sites
    (3) Scores updated on dashboard
    (4) Sites with largest changes contacted in advance

v) TEMP 03 - Temperature Outcome Measure (≤ 36.0 C at end of case)
    (1) TEMP 03 was an MPOG QCDR measure and it assigns an 'Incomplete' when there is no temperature recorded, per alignment with the MIPS measure
    (2) TEMP 03 is the only measure that has the 'Incomplete' result and it is not compatible with our measure framework
    (3) Since we do not participate as a QCDR anymore, we changed Incomplete to Flagged
    (4) No material change in performance across sites

Meeting concluded at 11:01 am