



Obstetric Anesthesia Subcommittee Minutes

August 4, 2021

1:00-2:00 pm EST - Zoom

	First Name	Last Name	Institution
	Sharon	Abramovitz	Weill-Cornell
	Aymen	Alian	Yale
X	Ami	Attali	Henry Ford-Detroit
X	Dan	Biggs	University of Oklahoma
	Traci	Coffman	St. Joseph Ann Arbor
	Eric	Davies	Henry Ford- Allegiance
	Carlos	Delgado Upegui	University of Washington
	Ghislaine	Echevarria	NYU
	Kim	Finch	Henry Ford
X	Ronald	George	UCSF
	Antonio	Gonzalez-Fiol	Yale
X	Ashraf	Habib	Duke
X	Jerri	Heiter	St. Joseph Ann Arbor, Chelsea, Livingston
	Jenifer	Henderson	St. Joseph Oakland
X	Wandana	Joshi	Dartmouth
	Rachel	Kacmar	University of Colorado
	Tom	Klumpner	University of Michigan
	Joanna	Kountanis	University of Michigan
	Stephanie	Lim	UCSF
	Angel	Martino-Horrall	Beaumont Health System
	Marie-Louise	Meng	Duke
X	Melinda	Mitchell	Henry Ford - Allegiance
	Arvind	Palanisamy	WashU
	Carlo	Pancaro	University of Michigan
	Monica	Servin	University of Michigan
	David	Swastek	St. Joseph Ann Arbor
	Mohamed	Tiouririne	UVa
X	Brandon	Togioka	OHSU
X	Christine	Warrick	University of Utah

	Jessica	Wren	Henry Ford
X	Joshua	Younger	Henry Ford-Detroit
X	Nirav	Shah	MPOG Quality Director
X	Kate	Buehler	MPOG Clinical Program Manager
X	Meridith	Bailey	MPOG QI Coordinator
X	Brooke	Szymanski-Bogart	MPOG QI Coordinator (OB program lead)
X	Tiffany	Malenfant	MPOG Clinical Informatics Specialist
X	Andrew	Zittleman	MPOG Clinical Informatics Specialist
X	Victoria	Lacca	MPOG Administrative Manager

A. Announcements:

a. Two remaining meeting dates

- i. November 3rd at 1pm EST
- ii. Any interest in an in-person meeting at ASA in October?

1. Poll launched to gauge interest

a. Planning to attend ASA?

- i. Yes: 4 (57%)
- ii. No: 3 (43%)

b. Interested in an in-person OB meeting?

- i. Yes: 5 (71%)
- ii. No: 2 (29%)

c. [Brooke Szymanski-Bogart](#) (MPOG OB Program Lead): Will send details for that event as we get close

d. Wandana Joshi (Dartmouth): Would you do a virtual component for the meeting at the ASA meeting in October for those of us who are not attending?

e. Christine Warrick (Utah) - Yes, I would be interested in virtual as well, given the uncertainty w COVID

f. Nirav Shah (MPOG Quality Director): Something we can consider as we are doing a hybrid MPOG Retreat. Will follow up with group after decision is made.

B. May 2021 Meeting Recap

a. Interest in identifying GA 01 cases where neuraxial anesthesia was used before general anesthesia was used. This has led to the development of a draft measure, GA 02, which we will discuss during this meeting

b. Interest in being able to filter BP 04 measure results by type of neuraxial used (spinal, epidural, CSE). We will review the case report tool where this was added

c. Normothermia discussion

- i. Committee agreed that the best place to start was with a review of TEMP 03 (hypothermia at the end of the case/PACU). A new measure was developed based off this feedback (TEMP 05) and will be reviewed

d. Continued discussion regarding standardization of documentation for conversion to general anesthesia

C. BP 04 - Breakdown by anesthesia type

- a. Hypotension (SBP <90) during cesarean delivery between neuraxial start and neonate delivered
- b. Interest at the May meeting to be able to filter cases by anesthesia type
- c. This functionality was added to the BP 04 'Measure Case Report Tool'

D. Accessing the Measure Case Report Tool

- a. Please reach out to support@mpog.zendesk.com if you do not have access
- b. Available on our website under Tools->Quality Case Reports or through the dashboard
 - i. You will be prompted to log in with your ASPIRE information
 - ii. Select your institution from the drop down menu (if you have access to multiple)
 - iii. Select the date range you are interested in
 - iv. Select the measures and Pass/Flag/Excluded cases you are interested in
 - v. Choose 'Generate Report' at the bottom of the page
 - vi. Once report is ready, choose "Download Report"
- c. BP 04 Filtering: You will now see a column in the BP 04 Case Report for anesthesia technique for easy filtering of cases
- d. Josh Younger (Henry Ford): The cases in that report are deidentified though right? How do I look them up in the EHR?
 - i. [Brooke Szymanski-Bogart](#) (MPOG OB Program Lead): There are a couple of ways to find the MRN. Can either put each of the MPOG Case ID into the desktop MPOG Case Viewer (accessible through the MPOG application suite) and can look up the case that way OR can use the Batch MRN Lookup tool, also accessible via the MPOG Application suite, which will automatically add a column for the MRN to the measure case report. Your ACQR can also assist with this if you don't have access to the MPOG App Suite. Please contact me with additional questions.

E. Unblinding the OB Data

- a. MPOG allows participants to view unblinded institutional comparison data on select measures at collaborative meetings yearly
- b. Facilitates further discussion and provides additional context to the comparison scores on the dashboard
- c. Would the OB Subcommittee be interested in an unblinded data review once per year?
 - i. All participants would be required to sign a confidentiality agreement prior to the meeting
 - ii. Only active MPOG sites would be able to participate and view the data
 - iii. We would encourage low/high performers on the OB measures to speak to the care they provide and current barriers they face
- d. Discussion:
 - i. Brandon Togioka (OHSU): Good idea. Personal experience with our own measures- we had the lowest score for the ASPIRE BP measure. I do think there is opportunity with this unblinded sharing for finding process improvements that leads to collaboration. Not usually an individual provider issue that causes

low institution performance scores- more process issues. Great opportunity for learning. We can all be collegial and professional with this.

- ii. Josh Younger (Henry Ford-Detroit): I agree, this would be beneficial. I was at the data review session during the ASPIRE meeting in July and think it went well.
- iii. Ashrab Habib (Duke) - I agree and would be very interested in this. I think it would give us an opportunity to share best practices and would be very useful.
- iv. Nirav Shah (MPOG Quality Director): Anyone with hesitation? Maybe an organization that may not be ready to implement this.
- v. Ami Attali (Henry Ford Health System): Would be a great idea to share information across sites for how to best improve given limited resources - collaboration can help utilize resources in the best way.
- vi. Nirav Shah (MPOG Quality Director): We will follow up with communication to the entire subcommittee for feedback before moving forward

F. General Anesthesia Documentation

- a. Standardization of documentation for reason to convert to GA
- b. Discussion:
 - i. Ron George (UCSF): Still putting finishing touches on this within Epic for anesthesia providers to confirm if general anesthesia was used and why. Will share any updates at an upcoming meeting
 - ii. Josh Younger (Henry Ford-Detroit): Are there other EMRs that are incorporated into MPOG other than Epic?
 - iii. Nirav Shah (MPOG Quality Director): Yes, the majority of MPOG sites use Epic however we do have a few others (Cerner, Centricity, Compurecord). We will always support non-Epic sites but the standardization will continue to align with Epic. For non-epic sites the content will be in MPOG but will be a lot easier for those who use Epic.
 - iv. Josh Younger (Henry Ford- Detroit): I think there is opportunity for us to share these different Epic infrastructure changes across institutions.
 - v. Nirav Shah (MPOG Quality Director): Easiest way is for Epic to build it into their foundation system- all sites will receive that infrastructure or update.
- c. **GA 01 Provider Attribution**
 - i. Percentage of cesarean delivery cases where general anesthesia was used
 - ii. Currently, this measure does not include provider attribution, meaning that individual providers are unable to see their cases for review
 - iii. Should provider attribution be added?
 - iv. Who should be the attributable provider?
 - 1. The provider signed in at neuraxial start?
 - 2. The provider signed in when general anesthesia was initiated?
 - v. Discussion:

1. Ron George (UCSF): I like the idea of attribution. I think it has been done at the start of the case when GA was initiated
2. Nirav (MPOG Quality Director): This does add a little more work for the site QI champion because providers will reach out with questions why they had a flagged case in their feedback email. The attribution doesn't have to be a single provider - it can be multiple providers.
3. Ashraf Habib (Duke): In regards to records, if they have a labor epidural that was converted to c-section, then anesthesia start is likely at the start of the labor epidural and may be a different provider than who is signed in at the time of the c-section (or when GA is initiated).
4. Josh Younger (Henry Ford-Detroit): would have to agree with that. Our system is similar to that. Is there value to attribute the obstetrician as well? In my experience how tolerant they are to wait for the epidural or spinal to start working may vary.
 - a. Nirav Shah (MPOG Quality Director): We don't always have the surgeon name so would be hard to attribute the obstetrician.
5. Brandon Togioka (OHSU) via chat: I agree. I would attribute to the provider in the operating room at the time of intubation
6. Ami Attali (Henry Ford) (via chat): Agree, should be at the time of induction of GETA
7. Wandana Joshi (Dartmouth) : I agree that it should be attributed to the time of general anesthesia. One of the negative parts of attribution is that if you have a low rate to begin with, you may be pointing fingers at people. It may be valuable at sites with a high percentage of general to see if there is a pattern among those who give GA.
 - a. Nirav Shah (MPOG Quality Director): There are always systemic issues involved and so you're right, you're never going to get it down to 0%. We could wait to add this to provider emails to allow OB leaders and the Quality Champion to explain this to providers at a departmental level to ensure the culture is there and ready for this.
8. Dan Biggs (U. Oklahoma) via chat: It should be the person signed in at induction
9. Dan Biggs (U. Oklahoma): It also depends on what kind of practice you are in. I am in a high risk unit now and may do three GA in a day, but in private practice almost never. What we are looking for is the percentage of failed regionals, which will be hard to get until we can extract that.
10. Christine Warrick (University of Utah): I do worry about focusing on the number for GA rates so much because the other side of avoiding GA is getting a lot of sedative meds for a poorly neuraxial block which I think would be interesting to look at as well.
11. Wandana Joshi (Dartmouth): SOAP has a lot of information out there under their centers for excellence. In general whether you're at a high risk academic center, their guideline is that the rate of GA should be <

5%. There is also a lot of literature out there on how to prevent epidurals from failing.

12. Ron George (UCSF): In the UK great documents on rates of GA whether they are under emergent or normal conditions.
13. Christine Warrick (Dartmouth): they use less epidurals in the UK as well and more spinals
14. Ron George (UCSF): That's another area we can learn from as well!
15. Nirav Shah (MPOG Quality Director): Not sure if there is consensus around adding provider attribution to this measure yet. If we do decide to add attribution, the group seems to agree that it should be the provider signed in at induction or time of conversion to GA but we won't move forward with that change yet. We'll bring this up at a future meeting to gain consensus around when/if attribution should be added to GA 01.

d. GA 02: New Measure

- i. Description: Percentage of cesarean delivery cases where general anesthesia was administered after neuraxial anesthesia
- ii. Measure Time Period: Anesthesia Start to Anesthesia End
- iii. Inclusions:
 1. Cesarean Delivery cases where neuraxial anesthesia was used
 - a. Cesarean delivery cases as determined by the 'Obstetric Anesthesia Type' Phenotype. Phenotype results included:
 - i. Cesarean Delivery
 - ii. Conversion (Cesarean Delivery Portion)
 - iii. Conversion (Labor epidural and cesarean delivery combined)
 - b. Neuraxial anesthesia use is determined by the 'Anesthesia Technique Neuraxial' phenotype. Results included:
 - i. Combined Spinal Epidural (CSE)
 - ii. Epidural
 - iii. Spinal
 - iv. Caudal
 - v. Neuraxial - unknown type
 - vi. Neuraxial - multiple types listed
- iv. Exclusions:
 1. Cesarean hysterectomies as determined by the 'Obstetric Anesthesia Type' phenotype
 2. Cesarean delivery cases that only use general anesthesia without neuraxial anesthesia
 3. Non-cesarean delivery cases
- v. Success: Cesarean delivery with neuraxial anesthesia completed without use of general anesthesia
- vi. Other Measure Build Details:

1. Use of general anesthesia is determined by the 'Anesthesia Technique: General' phenotype
 2. Time of general anesthesia administration is defined as the time of the earliest flag considered by the 'Anesthesia Technique: General' phenotype
 3. Use of neuraxial anesthesia is determined by the 'Anesthesia Technique: Neuraxial' phenotype
 4. The start time of neuraxial anesthesia is determined by the 'Obstetric Neuraxial Anesthesia Start Time' phenotype.
 5. Time of general anesthesia administration is defined as the time of the earliest flag considered by the 'Anesthesia Technique: General' phenotype
 6. Cases where 'measure end' precedes 'measure start' will be excluded from the measure
- vii. Responsible Provider: n/a, departmental only measure
- viii. Threshold: n/a information only
- ix. Measure performance by site (blinded) was shared with the committee- see slides 15-17 in the recording or PPT slides
- x. Discussion:
1. Ami Attali (Henry Ford Health System): There are a number of factors that can contribute to conversion from neuraxial to general technique. One of those reasons may be that the surgeon is not willing to wait for the labor epidural to be converted to spinal. Would be ideal to capture these reasons?
 2. Nirav (MPOG Quality Director): MPOG doesn't always have access to that information - either it isn't included in the anesthesia documentation in a standardized form. Often times, this data is stored as free text on a note. We don't have a good way of gathering that data and using it for measure build. UCSF and others are working on standardizing this documentation and in the future MPOG could use this data for measures.
 3. Ami Attali (Henry Ford Health System): If we talk to Epic about adding a reason for conversion so we can pull that data and subsequently pull to review?
 4. Nirav (MPOG Quality Director) - Yes. I think Dr. Ron George at UCSF and others have already started working with their IT teams to build this in. We can take that information and then share with non-epic sites to help them gather this data as well.

e. TEMP 05 - OB

- i. Description: Percentage of patients who undergo cesarean deliveries under general or neuraxial anesthesia for whom no body temperature was greater than or equal to 36 degrees Celsius (or 96.8 F) recorded within the 30 minutes

immediately before or the 15 minutes immediately after the case

- ii. Measure Time Period: 30 minutes before 'anesthesia end' to 15 minutes after
- iii. Inclusions:
 - 1. Cesarean Delivery cases as determined by the 'Obstetric Anesthesia Type' phenotype. Phenotype results included:
 - a. Cesarean Delivery
 - b. Conversion (Cesarean Delivery Portion)
 - c. Conversion (Labor epidural and cesarean delivery combined)
 - d. Cesarean Hysterectomy
 - e. Conversion (Cesarean Hysterectomy Portion)
- iv. Exclusions:
 - 1. Invalid cases where Measure End results prior to Measure Start
 - 2. Cases with no temperatures during the measure period
- v. Success: At least one body temperature measurement equal to or greater than 36 degrees Celsius (or 96.8 degrees Fahrenheit) achieved within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time.
- vi. Other Measure Build Details:
 - 1. **Cases with no temperature measurements within the measurement period will be marked as flagged** - Does this criteria make sense for OB?
 - a. Brandon Togioka (UCSF) - We have ways of getting this temperature (foley, etc) in the OR, despite this it isn't getting done. Our monitors don't tend to work well for patients who are on the cold side. For us, this means that they tried to get a core temp and it wouldn't work, meaning that the patient was too cold. From a QI and patient focus standpoint, we should continue to flag it and use those cases to try and improve on the labor floor.
 - b. Ashraf Habib (Duke) - Is it possible to let people know this is the reason why it was flagged?
 - c. Nirav Shah (MPOG) - Yes, we can add that information to the measure results so that providers know that the temperature was missing vs hypothermic
 - d. Ashraf Habib (Duke): I think this would be important- workflow may vary from institution to institution. Providing information on not recorded vs. not warm
 - e. Melinda Mitchell (Henry Ford Allegiance)- We don't use temp sensing foleys and have frustrations with axillary temps not being accurate. It may look bad on the record if the patient has a low temperature and it isn't reflective of the core temperature.
 - f. Nirav Shah (MPOG Quality Director)- This is why the measure extends to the PACU so that we can take the oral temperature

taken in PACU into account, as we know it may be difficult in the OR when the arms are out, etc.

g. Ami Attali (Henry Ford)- Can you share the workflow around the temperature sending foley?

i. Brandon Togioka (UCSF): Great question- I think it's about \$10-15 more for foley catheter placement. My approach was to ask the OB dept to pay for this so it didn't come out of the anesthesia budget. These foleys are placed after labor epidural is placed and you should know the temp at that point. These patients are high-risk because they are so exposed. Because this is important outside of the OR for laboring patients too, that's how the OB dept decided to cover this cost.

2. Temperature documented within the postoperative vital sign note in the anesthetic record or temperatures documented and mapped to the temperature physiologic concepts are acceptable sources for this measure.

3. Conversion from F to C: $F=32 +9/5 (^{\circ}\text{C})$

a. Artifact algorithm:

i. Less than 32.0°C (89.6F)

ii. Greater than 40.0°C (104.0F)

iii. Any minute-to-minute jumps $>0.5^{\circ}\text{C}$ equivalent.

Example: 0.125°C /15s, 0.25°C / 30s, 1°C / 2mins

Meeting concluded at: 1405 EST