Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, April 11, 2016

Attendees: P=Present; A=Absent; X=Expected Absence

P	Michael Aziz, MD - OHSU	**P**	Bhiken Naik – U of Virginia
P	Joshua Berris, DO - Beaumont	**P**	Bala Nair, PhD – U of Washington
P	Daniel Biggs, MD – Oklahoma	**P**	Nathan Pace, MD – Utah
P	Greg Giambrone, MS – Weill Cornell	**P**	W. Pasma - Utrecht
P	Greg Giambrone, MS – Weill Cornell	**P**	Leif Saager, MD – Cleveland Clinic
P	Shelley Housey, MPH – U Michigan	**P**	Nirav Shah, MD – U Michigan
P	Sachin Kheterpal, MD – U Michigan	**P**	Amy Shanks, PhD – U Michigan (MPOG)
P	Kai Kuck - Utah	**P**	Zachary Turnbill, MD – Weill-Cornell
P	Kai Kuck, MD - Utah	**P**	Tory Lacca, MBA – U Michigan
P	Tory Lacca, MBA – U Michigan (MPOG)	**P**	John Vandervest – U of Michigan

Ground Rules for PCRC:

1. Each protocol must have specific testable hypothesis with data available in MPOG data structure
2. People requesting specific data elements must also supply that data type to MPOG. If you don't submit that data type currently, then you can't get that type of data type out. However, if you have a co-investigator from another site that does supply that data, then you can ask for that type of data. The reason is so someone on the research team understands the limitations of each data element being requested and used
3. To ensure that there is not a lack of clarity about what the status of the proposal is, each proposal will get the following overall decision at the end of each presentation and discussion
    a. Accept with minimal or no changes required
        i. E-mail revision to PCRC
    b. Accept with moderate changes required
        i. Represent at a future PCRC
        ii. E-mail Revisions to PCRC
    c. Revise and reconsider at future meeting
    d. Reject
4. Meeting will be recorded to be shared later with members of MPOG via the MPOG website. There were no objections to this via the members that were on the call.

Meeting Minutes

Update on manuscript submissions, statuses:

a) Rescue of failed laryngoscopy – Still in review, submitted revision a month ago

b) Normative data for pediatric blood pressure – Cycled through a couple journals. Received a positive review from *Anesthesiology* now. Request for slightly different analytics now that are being worked on.

c) Infusion pump alarm limits – Ready to submit. Should be submitted with one week.

d) Acute kidney injury in non-cardiac surgery – Preliminary analysis submitted as an ASA abstract. We established that BP matters for high risk patients. Plan is to submit manuscript within 2 months.

e) Trends in transfusion – Manuscript being prepared.

f) Variation in intraoperative ventilator management during one-lung ventilation – Manuscript being prepared.

- Several MPOG abstracts were sent for ASA including data diagnostics, data collection tool, and data cleaning. We will bring these manuscripts to PCRC as mini proposals. Target journal BMC Anesthesiology. The goal is to establish what we do and how we do it.

Presentation: "1:2:3 What Outcome Have Thee? Impact of Anesthesia Staffing Ratios on Postoperative Outcomes"

Presenter: Leif Saager

Institution: University of Michigan

Comments:

- Do you have procedures that are 1:1 staffing ratios? We can ask each center based on a survey to reduce the noise. Or do we do it empirically and any case at a center level with a low supervision, remove those cases. Do we want hypothesis driven or data driven way?
- Is having any resident involved, is it an excluded case?
    - Agree that residents should be removed if it's exclusive. The PI is fine to keep a resident if it's for a break. Define as maximum of 5-10% can be done with resident, if not it will be excluded.
    - Dr. Pace asked why do we need to exclude resident cases? We could be accused of bias in setting up the study.
        - The initial thought is because with residents you can't cover more than 2 rooms with residents
        - At Utah, about half the cases are done with faculty by themselves. Therefore you can look at faculty alone, faculty + residents, faculty + CRNA
            - The idea is to look at faculty ratio with CRNA. The PI didn't want to make a comparison between anesthesiologists versus CRNAs, Residents. Rather, just how many CRNAs can you cover and how does that affect the outcome?
        - These are different policies models. This study focuses on IF you chose a model that attendings supervise CRNAs, do we see a difference in outcomes depending on the ratio.
            - Is this a structural question worth answering on its own?
                - Yes it is relevant research to publish
            - We can chose to exclude cases that are >1:4 ratio?
- The type of cases is going to be important to how many cases that you can adequately supervise. Is using the surgical groups (244 groups) adequate enough? How are you going to adjust for case type and time weighted average?
    - We should explore what the current practice patterns by cases. So if 1:4 is done, it's only done with a specific type of cases.
    - Potentially exclude MAC cases because it's too hard to be able adjust for that?
        - Suggest a sub-group analysis on this subset of patients such as endoscopies.
- Can we exclude cases that are billed as medical supervision?

    - We cannot tell that but we can tell if they are billing with more than 1:4 ratio for more than 5 minutes. We do not have enough modifier data to base it on the qz modifier.
- Pre-planned sensitivity analysis:
    - Only use cases strictly with CRNAs or keep only ones with CRNAs as the primary analysis and have the sensitivity analysis completed with any case with a minimal amount of residents involved.
    - Weekend only cases
- Any centers where relief patterns aren't documents
    - OHSU documentation is spotty. For break purposes, the CRNA/resident are logged out and the faculty is signed in.
    - U of Washington documents a break by a note. It will not be easy to determine this in the record.
    - Cornell – small breaks aren't documented that well. If it's a permanent take-over of a case then they do document it well.
- PI proposes to exclude break interferences. He doesn't think this will impact the case if it's 15 minutes or so.
- Are ASPIRE process of care measures affected by room coverage as a secondary outcome?
    - PI thinks it's a great idea because it validates the importance of ASPIRE measurements. It will link quality metrics to practice change.
- Do we want to include in-hospital mortality for those that have it? For the hospitals that don't have it, how do we handle those data?
    - We will restrict to sites that have in-hospital mortality and help those that do not have it to assist them to give us in-hospital mortality.
- What is the definition of return to OR?
    - 7-days is what is currently proposed
- How common are AA? There are only two sites that have them. PI is ok with focusing on CRNAs only
    - Univ of FL, Gainesville
    - Univ of Vermont
- Are we looking at experience of CRNAs?
    - No we do not the level of CRNA experience
- How are we dealing with weekends/weekdays?
    - Should we exclude weekends completely?
        - Several sites have elective cases on the weekends.
        - Exclude weekends from primary analysis?
        - Do a sensitivity analysis on weekend cases.
- How are missing data elements going to handled? Excluded or imputation?
    - Cases will be excluded except for a couple ones that we will input. The PI will revise the protocol to state which ones we will input.
- Missing data analysis plans should be in place prior to the start of the project.
    - The PI will adjust the protocol accordingly.

Voting:

Institution	Vote
Academic Medical Center (AMC) Amsterdam	*
Beaumont	*
Cleveland Clinic	*
Columbia	*
Mercy Health System	*
New York University	*
Oregon Health Science University	**Revise - Electronic**
St. Joseph	**Revise - Electronic**
University Medical Center of Utrecht	**Revise - Electronic**
University of Colorado	*
University of Florida	*
University of Michigan	**Abstain**
University of Pennsylvania	*
University of Oklahoma	**Revise - Electronic**
University of Tennessee	*
University of Utah	**Revise - Represent**
University of Vermont	*
University of Virginia	**Revise - Electronic**
University of Washington	**Revise - Electronic**
Vanderbilt	*
Washington University , St. Louis	*
Weill-Cornell Medical Center – New York Presbyterian	**Revise - Represent**
Yale	*

*Not on call

Final Decision: Revise – Electronic Revisions