

Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, August 8, 2016

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

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|----------|-------------------------------------|----------|-------------------------------------|
| A | David Adams, MD – U Vermont | A | Michael Mathis, MD – U Michigan |
| 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 |
| A | Jurgen de Graff - Utrecht | P | William Paganelli, MD – U Vermont |
| P | Shelley Housey, MPH – U Michigan | P | Leif Saager, MD – U Michigan |
| P | Leslie Jameson, MD – U Colorado | A | Robert Sanders, MD - Wisconsin |
| P | Sachin Kheterpal, MD – U Michigan | A | Kevin Tremper, PhD, MD – U Michigan |
| P | Tory Lacca, MBA – U Michigan (MPOG) | P | John Vandervest – U of Michigan |
| P | Amy Shanks, PhD – U Michigan | P | Greg Gimbrone – Weill Cornell |
| P | Annemarie Akkerman - Utrecht | P | Rob Schonberger - Yale |
| P | Kamal Maheshwari | | |

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.

Announcements

- Mike Aziz Failed DL project is published ahead on line with an editorial
- Jurgen deGraff pediatric norms will also be published ahead of time online
- ASA Annual Retreat registration is now open. Please go to the website and register. Two breakout sessions
 - Research
 - QI

Meeting Minutes

Presentation: “An observational study of end-tidal CO₂ trends in general anesthesia. A report from the Multicenter Perioperative Outcomes Group”

PI: AnneMarie Akkermans, Wilton van Klei

Primary Institution: Utrecht

Discussion Topics:

- Has the incidence of robot surgeries increased across the centers and is it a confounder and if these are changes in surgery not anesthetic techniques?
 - Whether it's laparoscopic or robotic, what do you choose to do as an anesthesiologist. How do we do this separation?
 - For primary hypothesis, you need to exclude them. For a secondary analysis you can include them
 - How do we determine a robotic surgery? Do we search procedure text?
 - Add into the protocol about a sub-group analysis by searching for key words in the procedure text for laparoscopic, Davinci, robotic
- Are you going to stratify emergency versus elective neurosurgery procedures?
 - Currently the PI hasn't thought of this. However, a neuroanesthesiologist treats those patients different?
- Should we exclude emergency cases in general because it's a controlled setting?
 - PI team thinks that's a good idea
- Remove the word target and phrase it as what are the practice patterns of ETCO₂.
- Because of the large sample size, is multiple imputation worth the time commitment? Perhaps just throw out the information that is not complete. You can do quantile regression as a way of handling separate logistic regressions above and below ETCO₂.
- How much change in practice patterns would you expect to see to have a clinically significant change in practice pattern?
 - The PI thought 5 would be a clinically significant change
 - How much change do you need to change an outcome. There isn't an outcome in this project but would need this information for an outcome focused project.
 - 10% relative change in clinical use would be clinically meaningful difference. This will be added into the protocol
- Are you thinking of looking at outcomes such as death and ETCO₂?
 - Yes for Utrecht at a single center but not MPOG
- The protocol states 10 minutes after intubation and ends 10 minutes prior to the end of surgery. How does the group feel about the 10 minutes? Is that a sufficient timeframe?
 - Dr. Pace thinks 30 minutes after intubation and 30 minutes before the end
 - If the intention is to find a stable period, we should need to find a time where there is little variability.

- Is surgery incision a marker because hemodynamic and ETCO2 target that are effective?
 - The PI team agrees that's a good idea
- How does PCRC feel about a time frame from incision to surgery end?
 - No objections by PCRC
 - The PI will determine which time frames to choose and there is no absolute answer
- What's the best way to exclude patients with spontaneous ventilation?
 - Do we not care intraop because we have a target range and we will intervene once it deviates?
 - The group seems to have no problem
- We will use area under the curve and adjust for the time measured for each stratified groups. It will be time weighted.
 - Dr. Pace - It's simpler to use the median of all the values.
 - But then that makes an entire case into one value
 - You could also express the variability by the interquartile range
 - We will discuss on the PI team and determine
- Procedures will be grouped in three month period. Why 3 months?
 - It's arbitrary
 - If you make the data too granular, to see the change 3 months is very optimistic.
 - Add into the protocol the first and last study period to see what changes
- Are you going to survey that the institution had a target and did something about the target?
 - Yes that will be added in.
- Does Bicarb need to be excluded?
 - Yes we can exclude those patients
- Come up with exclusion criteria for those patients that coded

Voting:

| Institution | Vote |
|---|-------------------------------------|
| Academic Medical Center (AMC) Amsterdam | * |
| Beaumont | * |
| Bronson | * |
| Cleveland Clinic | * |
| Holland | * |
| Mercy Health System | * |
| New York University | * |
| Oregon Health Science University | Accept – Electronic Revision |
| St. Joseph | * |
| Sparrow | * |
| University Medical Center of Utrecht | Abstain |
| University of Colorado | Accept – Electronic Revision |

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| University of Michigan | Accept – Electronic Revision |
| University of Pennsylvania | * |
| University of Oklahoma | Accept – Electronic Revision |
| University of Tennessee | * |
| University of Utah | Accept – Electronic Revision |
| University of Vermont | Accept – Electronic Revision |
| University of Virginia | Accept – Electronic Revision |
| University of Washington | Accept – Electronic Revision |
| Vanderbilt | * |
| Washington University , St. Louis | * |
| Weill-Cornell Medical Center – New York Presbyterian | Accept – Electronic Revision |
| Yale | Accept – Electronic Revision |

*Not on call

Final Decision: Accept Revise – Electronic Revisions