Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, June 11, 2018

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 no changes
    b. Accept with minor changes send revision electronically
    c. Accept with major changes and represent at PCRC
    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.

Attendance:

Miscellaneous Notes:

- MPOG Retreat the Friday before the ASA Conference

PCRC 058: Surgeon and Anesthesiologist Fatigue and Perioperative Outcomes: Evidence from the Multicenter Perioperative Outcomes Group

PI: Dr. Eric Sun, MD/PhD (Stanford University)

- Q: Assuming you have 30K patients with a 1% death rate that gives you ~300 deaths – for a logistic regression you need 10 outcomes for every covariate included in the model.
    - A: Our plan is to use a linear regression model.
- Comment: Current timeframe cutoffs included in the proposal may account for differences in call shifts.
    - A: We will plan to survey sites regarding their call shifts - will determine 4 or 5 questions to circulate to participating institutions.
    - Comment: May only circulate the survey to sites with the necessary data elements.
- Comment: There may be a difference in 5pm-7am on a weekday versus on a weekend.
    - A: We will adjust for weekday versus weekend in the analysis and will consider a sub-analysis on the weekend cases.
    - Comment: Include whether or not there is "night float" in the survey.
- Q: How are you attributing a provider to the case?
    - A: If more than 1 attending on the case, it will be excluded.
    - Comment: You may exclude too many cases this way – only option is the collation for "primary attending", which is available in MPOG. You may want to consider using that collation or the "percentage of case" for power reasons.
- Q: Is use of the data dependent on results of the survey?
    - A: No, it will just help to supplement the data.

Final Decision: Electronic Revisions

Institution	Vote
Academic Medical Center (AMC) Amsterdam	**N/A**
Beaumont	**N/A**
Brigham and Women's	**N/A**
Bronson	**N/A**
Children's Hospital of Orange County (CHOC)	**N/A**
Cleveland Clinic	**N/A**
Columbia	**N/A**
Henry Ford	**N/A**
Holland	**N/A**
MGH	**N/A**
Memorial Sloan Kettering	**N/A**
NY Langone	**Electronic revisions**
Oregon Health Science University	**Accept**
St. Joseph/Trinity	**N/A**
Sparrow	**N/A**
Stanford	**Abstain**
University Medical Center of Utrecht	**N/A**
University of California Los Angeles	**N/A**
University of Colorado	**N/A**
University of Michigan	**Electronic revisions**
University of Oklahoma	**Electronic revisions**
University of Pennsylvania	**N/A**
University of Tennessee	**Electronic revisions**
University of Utah	**Electronic revisions**

University of Vermont	**N/A**
University of Virginia	**Electronic revisions**
University of Washington	**N/A**
Vanderbilt	**Electronic revisions**
Wake Forest	**N/A**
Washington University, St. Louis	**N/A**
Weill-Cornell Medical Center – New York Presbyterian	**N/A**
Yale	**Electronic revisions**
University of Arkansas	**N/A**

PCRC 060: Intraoperative Fraction of Inspired Oxygen and Postoperative Outcomes

PI: Dr. Frederic (Josh) Billings, Vanderbilt University

- Comment: Probably 12 months away from EPIC extract for delirium into MPOG.
- Q: Nitrous oxide may impact FIO2. Has this been considered?
    - A: For the trial, FIO2 will be set at 80% to allow for 20% nitrous oxide or air. We have not considered impact of nitrous oxide for observational study, but we should. We will adjust for this in a multivariate regression and examine the effects of nitrous oxide on this association.
    - Comment: What do you think the implications are of nitrous oxide?
        - A: May impact providers FIO2 and lead to confounding by indication.
- Q: Characteristics of provider regarding FIO2.
    - A: Agree that nitrous oxide will affect FIO2 and will need to account for this in the analysis.
- Comment: Provider bias will need to be further understood in the observational study – some measure of how frequently you use FIO2 to cluster at the provider level or describers the provider as high/low users of FIO2.
    - Comment: Consider instrumental variable analysis for high/lower providers
- Comment: Lots of missing data – how will this be handled for composite outcome?
    - A: For observational study, will have to assume that patients without these labs (no troponin) will have not experienced this outcome.
    - Comment: Agree that the data will not be missing at random.
    - Comment: Protocol needs some proposed methods for handling the missing data. Consider multiple imputation, etc.
- Comment: Alternative approach for provider clustering – use median FIO2 used by that provider over X number of cases across X number of days
- Comment: For the preoperative FIO2 exclusion, could consider using whether they were intubated preoperatively as the exclusion criteria.
- Comment: AUC measurement is elegant – certain times during a case may need to be excluded (consider exclusion 5 min before/after intubation and extubation)
- Comment: SF ratio – may have limited data currently in MPOG
- Comment: ARISCAT pulmonary risk score could be used to identify patients at risk of pulmonary outcomes
- Comment: ICU length of stay will not be available in MPOG; in-hospital length of stay will only be available for inpatient cases with an admit/discharge date from billing codes.

Final Decision: Electronic revision

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Academic Medical Center (AMC) Amsterdam	**N/A**
Beaumont	**N/A**
Brigham and Women's	**N/A**
Bronson	**N/A**
Children's Hospital of Orange County (CHOC)	**N/A**
Cleveland Clinic	**N/A**
Columbia	**N/A**
Henry Ford	**N/A**
Holland	**N/A**
MGH	**N/A**
Memorial Sloan Kettering	**N/A**

NY Langone	**Accept**
Oregon Health Science University	**Abstain**
St. Joseph/Trinity	**N/A**
Sparrow	**N/A**
Stanford	**N/A**
University Medical Center of Utrecht	**N/A**
University of California Los Angeles	**N/A**
University of Colorado	**N/A**
University of Michigan	**Electronic revision**
University of Oklahoma	**Electronic revision**
University of Pennsylvania	**N/A**
University of Tennessee	**Electronic revision**
University of Utah	**Represent**
University of Vermont	**N/A**
University of Virginia	**Electronic revision**
University of Washington	**N/A**
Vanderbilt	**Abstain**
Wake Forest	**N/A**
Washington University, St. Louis	**N/A**
Weill-Cornell Medical Center – New York Presbyterian	**N/A**
Yale	**Electronic revision**
University of Arkansas	**N/A**