Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, January 9, 2017

Attendees: P=Present; X=Expected Absense

P	Alan Angel, MD - Bronson	**P**	Sachin Kheterpal, MD – Michigan
P	Mike Aziz, MD - Oregon	**P**	Kai Kuck, PhD - Utah
P	David Adams, MD - Vermont	**P**	Tory Lacca, MBA – Michigan
P	Shamsuddin Akhtar, MD - Yale	**P**	Steven Lins, MD - Bronson
P	Matthew Berg, MD - Yale	**P**	Bhiken Naik, MD - Virginia
P	Dan Biggs, MD - Oklahoma	**P**	William Paganelli, MD - Vermont
P	Germaine Cuff, PhD – NYU Langone	**P**	Weitz Pasma - Utrecht
P	Jurgen deGraff, MD - Erasmus	**P**	Karen Posner, MD – Univ of Washington
P	Robert Freindlich, MD - Vanderbilt	**P**	Leif Saager, MD – Michigan
P	Hugh Hemmings, MD, PhD – Weill Cornell	**P**	Rob Schonberger, MD – Yale
X	Shelley Housey, MPH – Michigan	**P**	Nirav Shah, MD – Michigan
P	Leslie Jameson, MD - Colorado	**P**	Amy Shanks, PhD – 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.

General Announcements:

- 2016 was a very successfully year with great advancements
- If you want to be considered an active site with MPOG you need to get ICD-9 codes, Anesthesia CPT codes and in-hospital mortality.
- You need to have given data within the last 2 years to be considered an active site.
- Some centers, the data is sitting in their local database but has not be uploaded to MPOG central. Leif is going to send out screen shots of what your data looks like in MPOG central, and then you can determine if that is what your MPOG local database has.

Enhanced Observation Studies

- The nine finalists are writing up their proposals and are due to the coordinating center on January 27th. The top 3 will be presented at February's PCRC.
- What kind of support is Michigan and MPOG going to provide for the winning study? The individual data collection will have to be done at each site, but the mechanism to enter the data and the storage we will provide

PCRC 0034

Title: *Anesthesia Dosing And Outcomes Among Surgical Patients Age≥65*

Principle Investigator: Shamsuddin Akhtar

Institution: Yale

General comments

- Are we going to measure baseline dosing and BP status?
    - Dosing is one of the independent variables. For part 1, we will include preop BP in the analysis as a confounding variable. For part 2, we will also include preop BP.
- Should include some measure of BP percentage drop?
    - Yes this should be included
- How are you going to handle the use of induction agents that have effects on BP?
    - Do we not include those cases in the primary analysis but include them in secondary analyses?
    - The PI agrees that we should do these two different types of analysis.
    - Add in a vasopressor requirement variable at induction
        - Potentially have some threshold for vasopressor use. If a small use is given, then it doesn't meet the threshold for "vasopressor requirement"
        - We may not be able to distinguish the vasopressor time and if it was a requirement with electronic charting
        - We will be able to determine if the MAP <55 at the time of vasopressor used
- Right now the definition is a binary outcome of MAP < 55 yes/no
    - Could you use the percentage drop from baseline as a continuous variable?
        - Absolutely we can take both approaches
- Are you going to have a time interval for the hypotensive event?
    - Yes for outcomes, we will have a yes/no did it drop and also as a time element from the number of minutes from post-induction, pre-incision
- What does your dose of propofol at induction mean when you have a long post-induction, pre-incision time?
    - It's a confounder
    - PI would hesitate to aprior set a time for when propofol was administered.
    - These is too different concepts: post-induction hypotension and pre-incision hypotension. There are two different mechanisms because the pre-incision hypotension maybe from the isoflurance, not the propofol at induction
        - Need to look at when the hypotension occurs. So the first moment of hypotension must be within 10 minutes of propofol dose.
- Is your primary question, an excessive dose of propofol at induction or hypotension induced for anesthetic management or hypotension management during the case?
    - Our focus is related to the induction dose given the age of the patient
- Exposure variable is induction dose of anesthesia of propofol

- We need to find a way to describe hemodynamic stability to be incorporated into the model
- If it's induction dose, the hypotensive event needs to be within a reasonable time. 10-15 minutes?
- The first hypothesis is completely descriptive. What is the common practice among elder patients to decrease our propofol induction doses.
- The exploratory outcome of AKI, MI, in-hospital mortality needs to be developed further to determine if it's post-induction pre-incision hypotension or hypotension throughout the case.
- For a clinical argument, how do know the patient didn't need that amount of propofol to be put under anesthesia?
    - We do not know what the dose should be at 80 years old
    - If we do .5 to .7 you are not going to have any recall (based on Avidan's work)
    - Assuming unconsciousness in the proposal and that is a questionable assumption if you did not see pilot data. Recall will not be a reasonable concern.
    - Come up with a dose to avoid hypotension and if that dose does not work, you assume hypotension
- Include a co-variate for median value of volatile anesthetic
- Is decade of age the right timespan?
    - Generate the curves according to decade. If there is a big curve, then you can go more granular to every 5 years.
    - Age is a continuous outcome, we "dumb down" our data if we put them in groupings. Think about using age as a continuous outcome and use the data to determine the cut-off. You can do a secondary analysis that uses 65 or 80.
    - Develop a Youden's Index for age at which you have a hypotensive event
- Need to include variables for the concept of frailty

Institution	Vote
Academic Medical Center (AMC) Amsterdam	**Not on call**
Beaumont	**Not on call**
Bronson	**Accept – electronic revisions**
Cleveland Clinic	**Not on call**
Holland	**Not on call**
Mercy Health System	**Not on call**
NY Langone	**Accept**
Oregon Health Science University	**Not on call**
Sparrow	**Not on call**
Stanford	**Not on call**
University Medical Center of Utrecht	**Not on call**
University of Colorado	**Not on call**
University of Michigan	**Accept – electronic revisions**
University of Pennsylvania	**Not on call**
University of Oklahoma	**Accept – electronic revisions**
University of Tennessee	**Not on call**
University of Utah	**Not on call**
University of Vermont	**Not on call**
University of Virginia	**Accept – electronic revisions**
University of Washington	**Accept – electronic revisions**
Vanderbilt	**Not on call**
Washington University , St. Louis	**Not on call**
Weill-Cornell Medical Center – New York Presbyterian	**Not on call**
Yale	**Abstain**

Final Discussion: Accept with electronic revisions