Multicenter Perioperative Outcomes Group (MPOG) PCRC Meeting Notes – Monday, January 12, 2015

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

Active PIs		In Progress PIs Continued	
A	Michael Avidan, MD - Wash U	**A**	Brian Bateman, MD - MGH
P	Michael Aziz, MD - OHSU	**A**	Matthias Eikermann, MD - MGH
A	Mitchell Berman, MD - Columbia	**A**	Bassam Kadry, MD - Stanford
A	Randal Blank, MD - Virginia	A	Fabian Kooij, MD – AMC Amsterdam
P	Daniel Biggs, MD – Oklahoma	**A**	Warren Levy, MD – Pennsylvania
A	Robert Craft, MD –Tennessee	**A**	Philip Lirk, MD – AMC Amsterdam
A	Douglas Colquhoun, MD –Virginia	**A**	Marco Navetta, MD – Santa Barbara Cottage
A	Jurgen de Graaff MD – Utrecht	**A**	David Robinowitz, MD - UCSF
A	Karen Domino, MD, MPH – U of Washington	**P**	Leif Saager, MD – Cleveland Clinic
P	Marcel Durieux, MD, PhD- Virginia	**A**	Robert Schonberger, MD - Yale
P	Jesse Ehrenfeld, MD - Vanderbilt	**A**	Scott Springman, MD – Wisconsin
P	Ana Fernandez-Bustamente, MD - Colorado		
A	Peter Fleishut, MD – Weill-Cornell	**Chairs**	
A	Alexander Friend, MD –Vermont	**A**	David C. Adams, MD - Vermont
A	Daniel Helsten, MD – Wash U	**A**	Jerry Epps, MD – Tennessee
P	Leslie Jameson, MD - Colorado	**A**	Timothy Morey, MD - Florida
P	Teus Kappen, MD - Utrecht	**P**	Kevin Tremper, PhD, MD - Michigan
P	Sachin Kheterpal, MD - Michigan	**A**	Warren Sandberg, MD, PhD – Vanderbilt
P	Kai Kuck, MD - Utah	**P**	Wilton van Klei, MD – Utrecht
A	Bala Nair, PhD – U of Washington	**MPOG**	
P	Nathan Pace, MD – Utah	**A**	Mark Dehring
P	William Paganelli, MD – Vermont	**P**	Genevieve Bell
P	W. Pasma - Utrecht	**P**	Shelley Housey, MS
P	Nirav Shah, MD	**P**	Tory Lacca, MBA
A	Kelley Smith, MD – Utah	**P**	Amy Shanks, PhD
A	Jonathan Wanderer, MD - Vanderbilt	**P**	Tyler Tremper
A	Kevin Wethington, MD - Utah	**P**	John Vandervest
P	Anke Winter, MD, MSc – Wach U		

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.

Updates on Existing PCRC Projects:

- PCRC-0016: *Intraoperative Lung Protective Ventilation Trends and Practice Patterns*, Presented by Dr. Bender from the University of Vermont.
  - Manuscript has been accepted by Anesthesia and Analgesia pending revisions
- PCRC-0017: *Comparison of patient characteristics and perioperative outcomes of patients with a formal diagnosis, preoperative bedside diagnosis or no diagnosis of obstructive sleep apnea.* Presented by Dr. Fernandez-Bustamante and Dr. Jameson from Colorado.
  - The project had minor revisions that were not necessary for re-presentation. Revision sent to the group on Saturday 1/10/2015 and need responses for 1/16/2015. Power point will be posted on the website.

Presentation

Title: Current practice variations in the treatment of intraoperative hypotension

Proposed Authors: Esther M. Wesselink, MD; Wilton.A. van Klei, MD, PhD; Linda M Peelen, PhD; Arjen J.C. Slooter, MD, PhD; Wietze Pasma DVM, Sachin Kheterpal, MD, MBA

Primary Institution: Utrecht

Presented by: Teus H. Kappen, MD

Discussion Points:

- Is the end result, a descriptive set of animations and we choose which graph to put into a manuscript? Or does the additive model give statistical feedback?
  - A cut-off will not be calculated. The data will be displayed graphically and descriptive in nature. The PI may be able to correlate specific comorbidities and treatment for hypotension.
- Has exploratory analyzes been completed at Utrecht?
  - They have not completed an exploratory analysis yet
- Hypotension is a symptom of a large variety of underlying problems. Stratification is being done but there is a lot of variability in why a patient is hypotensive. We do not know what the underlying pathophysiology is of the hypotension.

    - PI looking at not how we treat hypotension but when do we treat hypotension.
    - Would also like to look at preoperative comorbidities but at this time point it's too large of a question to answer
- Lay out a strategy for artifact reduction
    - Look at the data first and decide if it's an artifact or not. It's an objective process. Need to design a rule for what is an artifact. There is a slight difference in artifacts by center but most artifacts are for a reason such as drawing off the a-line. For example, too low of a pulse pressure could be a good starting point. Leif will share his current artifact reduction techniques. John will also send out what UM currently does for artifact reduction
    - Perhaps wait to have 2 or 3 episodes where the BP violated a rule to determine if it's an artifact or not.
- Timing: This could determine when providers document interventions. During induction it may not be reliable but may be more reliable during maintenance.
    - The PI doesn't think the timing should be the main point of the manuscript
- How will this study change practice and what is the next research step out of this manuscript?
    - This research will help determine what is hypotension and at what level are we treating as Anesthesiologists. We may be able to relate to outcomes as well.
- A logical next step, for a specific age group, specific comorbidity profile, what is hypotension?
    - We are probably treating at lower thresholds than what we think we are treating. Therefore we will need to improve at what level we treat
- Figure 2, the main emphasis is plotting histograms to make movies. You can use histogram plotting models or density estimators. Dr. Pace would suggest look for what is a predictor of a timing of intervention. You could include the duration of intraoperative hypotension as the model. You need to make it a mixed models since patients may have more than one episode.
    - The PI would like to make it visual for the beginning and the mixed models are difficult to interpret. Start with a few variables and if there is no single, there is no need to do more complicated techniques. If something is found, then modeling will be performed.
    - Figure 2 doesn't offer any theory on how to interpret. There is no theory to compare histograms.
- Include a possible statistical plan to run models before the study is completed for transparency.
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Institution	**Vote**
Columbia	**Absent**
Oregon Health Science University	**Electronic revision**
University Medical Center of Utrecht	**No vote**
University of Colorado	**Electronic revision**
University of Florida	**Absent**

University of Michigan	**Electronic revision**
University of Oklahoma	**Electronic revision**
University of Tennessee	**Electronic revision**
University of Utah	**Revise and represent**
University of Vermont	**Absent**
University of Virginia	**Electronic revision**
University of Washington	**Absent**
Vanderbilt	**Revise and represent**
Washington University , St. Louis	**Electronic revision**
Weill-Cornell Medical Center – New York Presbyterian	**Absent**

Final Decision: Minor Revisions – Send out electronically for review

Updates

Database updates / Q&A

a. Discharge ICD9
b. Professional Fee
c. Mortality

We need continued political pull by all institutions to get their Discharge ICD9, Professional Fee and Mortality data. We discussed this with the Executive Committee and they agreed this will be a minimum requirement for MPOG participation. We are revising our mortality staging in February. The discharge codes we will require will not restricted to the OR episode.

February PCRC planning

No proposals for February and if anyone wants a February date.