Multicenter Perioperative Outcomes Group (MPOG) PCRC Meeting Notes – Monday, March 10, 2014

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

Active PIs		In Progress PIs Continued		
Α	Kenneth Abbey, MD - OHSU	Α	David Robinowitz, MD - UCSF	
Р	Michael Avidan, MD - Wash U	Р	Leif Saager, MD – Cleveland Clinic	
Р	Michael Aziz, MD - OHSU	Α	Robert Schonberger, MD - Yale	
Α	Mitchell Berman, MD - Columbia	Α	Scott Springman, MD – Wisconsin	
Р	Daniel Biggs, MD – Oklahoma	Chairs		
Α	Robert Craft, MD –Tennessee	Α	David Adams, MD - Vermont	
Α	Douglas Colquhoun, MD –Virginia	Α	Wolfgang Buhre, MD - Utrecht	
Α	Marcel Durieux, MD, PhD- Virginia	Α	David Brown, MD – Cleveland Clinic	
Р	Jerry Epps, MD - Tennessee	Α	Michael Cahalan, MD - Utah	
Р	Jesse Ehrenfeld, MD - Vanderbilt	Р	Jerry Epps, MD – Tennessee	
Р	Ana Fernandez-Bustamente, MD - Colorado	Α	Alex Evers, MD – Wash U	
Α	Alexander Friend, MD –Vermont	Α	Jane Fitch, MD – Oklahoma	
Р	Daniel Helsten, MD – Wash U	Α	Hugh Hemmings, Jr., MD, PhD, FRCA - Cornell	
Α	Sandra Holtzclaw, MD - Vanderbilt	Α	Thomas Henthorn, MD –Colorado	
Α	Leslie Jameson, MD - Colorado	Α	Roberta Hines, MD, FANZA - Yale	
Р	Sachin Kheterpal, MD - Michigan	Α	Jeffrey Kirsch, MD - OHSU	
Α	Fabian Kooij, MD – AMC Amsterdam	Α	G. Burkhard Mackensen, MD, PhD – U of Wash	
Α	Philip Lirk, MD – AMC Amsterdam	Α	Mervyn Maze, MD - UCSF	
Α	Timothy Morey, MD - Florida	Α	Timothy Morey, MD - UCSF	
Р	Nathan Pace, MD – Utah	Α	Marco Navetta, MD – Santa Barbara Cottage	
Α	William Paganelli, MD – Vermont	Α	Robert Pearce, MD, PhD - Wisconsin	
Α	Stephen Robinson, MD - OHSU	Α	Howard Schapiro, MD - Vermont	
Α	Kelley Smith, MD – Utah	Α	Wolfgang Schlack, MD - AMC	
Α	Jonathan Wanderer, MD - Vanderbilt	Α	Kevin Tremper, PhD, MD - Michigan	
Α	Kevin Wethington, MD - Utah	Α	Warren Sandberg, MD, PhD – Vanderbilt	
		Α	Howard Schapiro, MD - Vermont	
In-P	rogress Pls	Α	George Rich, MD – Virginia	
Α	Maged Argalious, MD – Cleveland Clinic	Α	Wilton van Klei, MD – Utrecht	
Α	Brian Bateman, MD - MGH	Α	Jeanine Wiener-Kronish, MD- MGH	
Р	Jurgen C. de Graaff, MD, PhD - Utrecht	Α	Margaret Wood, MD - Columbia	
Α	Karen Domino, MD, MPH – U of Washington	MPO	MPOG	
Α	Matthias Eikermann, MD - MGH	Р	Genevieve Bell	
Α	Peter Fleishut, MD – Weill-Cornell	Р	Tory Lacca, MBA	
Α	Bassam Kadry, MD - Stanford	Р	George Mashour, MD, PhD	
Α	Bala Nair, PhD – U of Washington	Р	Amy Shanks, MS, PhDc	
Α	Marco Navetta, MD – Santa Barbara Cottage	Р	Tyler Tremper	
Α	Shu-Fang Newman – U of Washington	Р	John Vandervest	
Р	W. Pasma - Utrecht	Р	Milo Engoren, MD	

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
 - b. Accept with major changes required
 - 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.

Presentation:

Title: Do perioperative beta blockers and blood transfusion therapies modify the effectiveness of the other therapy?

Principal Investigator: Milo Engoren, MD

Proposed Authors: Sachin Khetepral, MD, MBA, Elizabeth Jewel, others

Primary Institution: Michigan

Discussion Points:

Discussion Points:

- Should we only use sites that can give co-morbidities?
 - Dr. Engoren initially thought it's nice to have the specific co-morbidities because these would affect the beta-blocker use. He thinks the non beta-blocked group would have more co-morbidities.
 - Dr. Aziz thinks that we do need to control for specific co-morbidities and ASA would not control for the underlying disease processes.
 - Yes include co-morbidities but if they actually took the medication within 24 hours which will be the hardest to ensure.
 - This is why we are using the SCIP-CARD measure
 - o Will need to include co-morbidities, not just stick with ASA
 - o Can add in Vanderbilt now
- Will need to determine where the SCIP-CARD data is from each site
 - Oregon doesn't have this detail

- Colorado doesn't have 100% fill rate. Epic is 100% accurate in pre-op. In Centricity days it was in the nursing record but it will be more difficult to query. The need for beta-blockers is low
- Vanderbilt has all the co-morbidities and has a time administered for the past 3.5 years
- o Oklahoma has the co-morbidities and the SCIP-CARD measure
- Tennessee was not documented
- Vermont not on the call, will need to follow-up
- Since we may not have reliable SCIP-CARD data, is this study still of value? Is the analysis still worth doing since we would not know if the patient was currently blocked? Dr. Kheterpal thinks yes.
 - Yes the analysis is still worth doing
- What are the key questions or hypothesis that this study is trying to answer?
 - What do I do as an anesthesiologist for a transfusion threshold? What is the appropriate hemoglobin threshold to transfuse and does that vary for those patients that are taking beta-blockers?
- Will need to get specific troponin guidelines from each site
- The authors should provide more detail on the threshold for anemia for the conditional logistic regression
 - Will use the lowest hemoglobin intraoperatively, if there isn't one measured use the most recent one preop?
 - No, if there is no intraop hemoglobin and if they are transfused to just exclude those patients
 - o How about for the non-transfused group?
 - Use the hemoglobin that is the first post-op day
 - o With the figure, how would you interpret the threshold?
 - Cross-over point around 9 where the lines cross and therefore would be the appropriate threshold
 - How do you take into effect that everything is estimated with error and they will have confidence intervals?
 - Yes we can include the confidence interval
 - Most of the lab accuracy isn't good enough to have a 0.1 change and everyone will be different and cause noise.
 - o How are you doing to deal with people who get transfused before the hemoglobin because they are using pulse oximetry and not hemoglobins?
 - If they are transfused with no hemoglobin value at all, they will be excluded
 - If they are transfused and have hemoglobin value documented, it will still reflect something close to what the nadir value was
 - Need to document in the limitations section of the manuscript that the nadir value may not be accurate
 - The lab hemoglobin is not always being used now
 - Since we are looking at site data as well, we can see if the data are different between those that use pulse oximetry to measure hemoglobin versus taking the actual value

Institution	Vote
Academic Medical Center (AMC), Amsterdam	
Columbia	
Oregon Health Science University	Revise and represent
University of Colorado	Accept with moderate revisions
University of Florida	
University of Michigan	Abstain
University of Oklahoma	Accept with moderate revisions
University of Tennessee	Accept with moderate revisions
University of Vermont	
University of Utah	
University of Virginia	
Vanderbilt	Revise and represent
Washington University, St. Louis	

Final Decision: Revise and represent in April 2014 but accepted

Discussion: Death Database

- When we started MPOG in 2008, we had a robust Social Security death database. Since November 2011, they stopped contributing 30% of the deaths and over the last several months, there is a new interpretation of the privacy laws so going forward, research use of the death masterfile is being eliminated. It was originally designed for fraud protection. The definition of valid uses does NOT include research use. It will probably be an illegal source within the next few months
- Do we go after state specific indices now? We can currently get Michigan and Ohio death data
- Recommendation: Obtain in-hospital mortality from each site and we develop the structure within the MPOG database to collect this within the next several months.
- Recommendation: Develop working group for state specific death indices. This may take several years to determine how to work with each state's privacy rules.
- Wash U: In-hospital mortality is available. Death beyond discharge is difficult. Most of their patients come from two states
- Centers for Medicare/Medicaid would what to use death data, is there any chance that this could be changed?
 - o Several large groups have asked for this but no answer

- Perhaps the academic "big data" groups should ask and not as a group that is seeking a benefit from the data
- Recommend take the existing death data, run that and save it for future use and then cut-off at that point and then work on getting in-hospital death from each site. Is that reasonable?
 - o Yes
- Will the insurance agencies be willing to give death data?
 - o Dr. Jameson will investigate if this is feasible
- Sachin will develop a specific in-hospital death extraction specification and Mark Dehring will communicate with each site
- Start with a larger hgb grouping (0.5? maybe) and whittle down to smaller. Work with ranges consistent with the margin of error for the test
- If only a hematocrit is documented, will we convert to hgb by dividing by 3?
- Assume that specific beta blocker agent analysis will be underpowered
- Are we excluding massive transfusion?

Follow-up on Mashour Stroke Project

- Each site will have to go into each EHR to confirm the stroke
- Amy will contact each site with a template IRB
- Sites to include are Michigan, Mass Gen, UVA, Columbia, Wash U, Utah, and Vanderbilt

ASA Abstracts – Deadline April 10 at 11:59 (CST)

- Mike Aziz for Failed DL
- Michigan transfusion project
- Please contact Amy Shanks (<u>amysha@med.umich.edu</u>) if you need assistance