Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, September 8, 2014

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

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.

Presentation

Title: The Epidemiology and Impact of Medication Errors in the Perioperative Setting

Proposed Authors: Amy M. Shanks, MS, Michelle Housey, MPH, Sonia Pulgar, MPH, Sachin Kheterpal, MD, MBA

Presented by: Mark S. Hausman, Jr., MD

Discussion Points:

- How many institutions are capable and willing to submit their data for this project? The medication error data will be available centrally for this project and other projects.
    - Currently we have Univ of Michigan, Cornell, U of Oklahoma, Vanderbilt, Utrecht, Colorado, OHSU, Columbia, Tennessee, Vermont
- QA data at one institution is held at the institutional level. How will this be dealt with? It's not a part of the EHR anesthesiology system and not easily retrievable
- What is the definition of an error?
    - Currently the proposal is written as documented as self-report or in the QA system. Not necessarily where the data are stored
    - An error is an error and regardless of how it happened, it happened so let's look at it.
- Because identified cases will need to be provided at the local site, an additional IRB will need to be submitted since an investigator at the site will need to go in and complete the electronic version of the data collection sheet.
- The sponsor is Beckton Dickerson company. They have licensed a technology that they will be releasing at this year's ASA that uses a barcode system. This is designed to decrease the amount of medication errors. They need a value statement and a resource consumption concept. They do not know the resource consumption, nor do we in the Anesthesiology community
- Any additional data collection elements to be added?
    - None were vocalized
- Do institutions assign a level of harm internally?
    - Yes some sites do but not specific to the NCC classification system. We want a medication error specific nationally recognized system.
- Our event rate may be lower or higher depending on near misses than expected
- Under-recording – Only a small fraction enter the database and not every medication error makes it into the QA system

    - We could determine if there are differences across institutions but yes there will be an under-recording
- Are any institutions currently using a bar-code system to prevent medication error? Could this be a confounding error? Should we ask each institution if they are using some sort of technology?
    - Agreement from PI. Will add into the methodology section stating that we assume that each site draws up the medication in the morning. The description of how medications are drawn up by institution should be disclosed
- Possibly add in time of day versus weekend/weekday?
    - Yes this will be added in
- How do we get at resource utilization that we can actually get the data?
    - Need to make sure that we aren't double counting. A health economist suggests not going after any charges and look at LOS, itemized drugs and calculate dollar amounts that way
    - One institution could not do dollars but could do other resources
- What is the estimate of self-reported events?
    - This will be under-reported.
    - However we are interested in those medication errors that causes harm and our "gut" feeling is that those are the ones that will be captured accurately (or at least more accurately)
- Should we be excluding peds patients? Are they a more at risk population?
    - PI: The etiology of a peds error will be different than with adults. The consequences will also be different. The pathophysiology of the error will be different.
    - Peds will be a great population for a separate study
- Question for the PI: Finding the incidence of medication errors, take the "bad" things that happen in the OR and then look retrospectively to see if medication errors are the reason for it?
    - PI: He has not thought of this but the error may not be known to the provider so how do you prove it? He will think about this further and see if we can catch more events this way
- Future study – Look at known medication errors and then look through the EHR to determine if there are any "red flags" for errors.
- For matching – will add in matching on institution
- One institution expressed that errors in the PACU and ICU are more effectively documented than in the OR due to nursing metrics.
- Contribution will be getting medication errors into each institutions local MPOG database
- In the analysis or discussion, might be able to determine what level or under-reporting or true-reporting would have to be reported to make it a viable/useful edition to safety. Can you use these data for a power analysis for BD?
- PI: If it makes sense to look at peri-operative orders or just focus on intraoperative medication orders?

    - Sachin: The thought is to go after medication errors that are actually pushed by anesthesiologist and not any orders. Perhaps just look from anesthesia start to anesthesia end because that is when the anesthesiologist is responsible.
- University of Vermont would like to participate and will be added to the proposal

Institution	Vote
Columbia	**Accept - Minor revisions**
Oregon Health Science University	**Accept - Minor revisions**
University Medical Center of Utrecht	**Accept - Minor revisions**
University of Colorado	**Not on call**
University of Florida	**Not on call**
University of Michigan	**Abstain**
University of Oklahoma	**Accept - Minor revisions**
University of Tennessee	**Accept - Minor revisions**
University of Utah	**Accept – Moderate revisions**
University of Vermont	**Accept – Minor Revisions**
University of Virginia	**Not on call**
University of Washington	**Accept - Minor revisions**
Vanderbilt	**Not on call**
Washington University , St. Louis	**Not on call**
Weill-Cornell Medical Center – New York Presbyterian	**Not on call**

Final Decision: Accept – Minor Revisions (however we will update PCRC group on data collection of events)

Other Topics:

- Patrick Bender's TV study has been sent out to PCRC members to ensure that we used the data in a way that is concordant with what the proposal has stated. If you have any concerns please respond promptly. If there is "bad science" please let us know and we will delay the submission.
- As we are doing more and more projects and obtaining more and more sites into MPOG, we need to have an agreement amongst us on how we think authorship works for future projects? Historically if you were involved with manual review or reviewing the manuscript then you were a co-author. Allowing your data to be in the database is not currently the threshold for being an author on the manuscript? Are people comfortable with this or does each person's PCRC participation enough for authorship?
    - No expressed concerns with the existing status quo

    - PCRC members should be acknowledged in the process
    - The PI is responsible for having additional help brought on-board and authorship assigned accordingly
    - Should we not be asking or internal colleagues to get involved?
        - We probably don't need to be "looking" for content experts except for rare research areas
        - There is a worry that we go after "content experts" at each site
    - If somebody offers a PI feedback, then perhaps they should be added in as an investigator?
- For each dataset that is distributed to the PI and research team, it will mostly likely have data extraction issues that will need to be investigated. Please have your research team contact Amy Shanks (amysha@med.umich.edu) and/or Sachin Kheterpal to have guidance how to properly do a "sniff test" using the MPOG application case viewer

Industry Fee Schedule

- The fee schedule has been created by the executive board
- The data access fee is for the patients that are included in the study. This is a starting point in the conversation with a sponsor.
- A proportion of the data access fee will go to each site that is participating
- Executive committee recommended that we do not disperse funds until we have a year of operating costs for MPOG. This will be discussed further at the MPOG retreat executive committee.
- Is $35/hr for a research assistant to extract data responsible?
    - No feedback was given
- The budget creation will be signed off by each participating site prior to submission to BD.