

**Multicenter Perioperative Outcomes Group (MPOG)**  
**PCRC Meeting Notes – October 12, 2012**  
**MPOG Retreat @ ASA – Washington DC**

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

<b>Active Pls</b>		<b>In-Progress Pls</b>	
<b>P</b>	Kenneth Abbey, MD - OHSU	<b>P</b>	Michael Avidan, MD - Wash Univ, St. Louis
<b>P</b>	Michael Aziz, MD - OHSU	<b>P</b>	Brian Bateman, MD - MGH
<b>P</b>	Mitchell Berman, MD - Columbia	<b>P</b>	Edward Bitner, MD - MGH
<b>P</b>	Daniel Biggs, MD – Oklahoma Univ Med Cntr	<b>A</b>	Rich Colquitt, MD – Univ of Virginia
<b>P</b>	Robert Craft, MD – University of Tennessee	<b>P</b>	Robert Craft, MD - University of Utah
<b>P</b>	Jerry Epps, MD - University of Tennessee	<b>A</b>	Marcel Durieux, MD – Univ of Virginia
<b>A</b>	Alexander Friend, MD – Univ of Vermont	<b>P</b>	Matthias Eikermann, MD - MGH
<b>P</b>	Leslie Jameson, MD - Univ of Colorado	<b>A</b>	John Hanks, MD – Univ of Virginia
<b>P</b>	Sachin Kheterpal, MD - University of Michigan	<b>P</b>	Dan Helsten, MD – Wach Univ, St. Louis
<b>P</b>	William Paganelli, MD – Univ of Vermont	<b>P</b>	Fabian Kooij, MD - Amsterdam
<b>A</b>	Stephen Robinson, MD - OHSU	<b>P</b>	Angela Lipschutz, MD - UCSF
<b>A</b>	John Walsh - MGH	<b>P</b>	Timothy Morey, MD - Univ of Florida
<b>P</b>	Kelley Smith, MD – Univ of Utah	<b>A</b>	Marco Navetta, MD – Santa Barbara Cottage
<b>P</b>	Kevin Wethington, MD - Univ of Utah	<b>P</b>	Nathan Pace, MD – Univ of Utah
		<b>P</b>	W. Pasma - Utrecht
		<b>P</b>	Robert Pearce, MD – University of Wisconsin
<b>Chairs</b>		<b>P</b>	David Robinowitz, MD - UCSF
<b>P</b>	F. Kayser Enneking, MD	<b>P</b>	Scott Springman, MD – Univ of Wisconsin
<b>A</b>	Thomas Henthorn, MD – Univ of Colorado	<b>MPOG</b>	
<b>A</b>	Jeffrey Kirsch, MD - OHSU	<b>P</b>	Mark Dehring
<b>P</b>	Howard Schapiro, MD - Univ of Vermont	<b>P</b>	Robert Freundlich, MD
<b>P</b>	Kevin Tremper, PhD, MD - Univ of Michigan	<b>P</b>	Tory Lacca, MBA
<b>P</b>	Warren Sandberg, MD, PhD – Vanderbilt	<b>P</b>	Michelle Morris, MS
<b>P</b>	Howard Schapiro, MD - Vermont	<b>P</b>	Amy Shanks, MS, PhDc

**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 Anesthesiologists Matter?

Proposed Authors: Sachin Kheterpal, MD, MBA, Justin Dimick, MD, MS, John Birkmeyer, MD, Mousumi Banjeree, PhD, Amy Shanks, MS, Kevin K Tremper, PhD, MD, and others???

Primary Institution: Michigan

**Discussion Points:**

- As an anesthesiologist, are you taking into account the CRNA/Resident as a variable?
  - If anesthesiologists do matter, then your range of variability is different from another attending. Therefore it doesn't matter who your CRNA/resident is. There is an interaction factor we are not exploring at THIS stage of the game. Is it the volume or who you are working with?
    - Second study - Does the in-room provider matter (i.e. CRNA/Resident)?
    - Sachin wants to know, do we look at the CRNA/Resident now or do we do this study first and then look at this second?
      - Participants thought it's best to look now
      - We could do it both ways Sachin suggested
      - Participants mentioned it's important to know how many rooms the attending is covering?
      - ??Need to look at the specific type of surgery.
        - We are looking at procedural complexity. Anesthesiologist might not matter for low-risk operations
- Huge set up for Hawthorne effect? Just starting the study may be an intervention. Will you be able to go back?
  - This is all retrospective
- When you look at surgeons, they tend to stay within their fields. Anesthesiologists cover a larger breath that they cover. Can you address this?
  - Sachin - Yes we could but we aren't doing that right now. We can look at how many times that provider is involved with a specific type of case. Sachin says to keep it simple right now and not look at previous case load
  - Leslie Jameson - thinks is very important to look at how many cases they are supervising at that time. It's a surrogate for the actual time that you are supervising that individual.
    - Need to look to see if the attending is doing the case by him or herself.
    - Sachin said we can look at a fixed effect for if you are doing it by yourself, supervising 1, 2, 3, etc
- Concern about who is the primary anesthesiologist. Participant suggests 51% of the case performed by one provider and started and ended the case.
  - Sachin suggested the provider has completed 51% of the case and started the case suggestion however Ken Abbey said that you should be starting and ending the case

- Michael Avidan suggested not looking at everything in the model at this time. Just answer the anesthesiologist provider question first WITHOUT patient comorbidities
- Jim Eisenach - What would you say is the effect size we are looking for?
  - Sachin - 5% of the center variation is explained by the provider
  - Sachin, can you define this?
    - Yes we can. We are starting from 0%, so a 5% center variation is reasonable based upon the conversations with surgeons
- Are there significant inter-provider differences?
  - If you do see a difference, can you figure out what case types and patient profiles
- The sickest patients may get assigned the best anesthesiologist. Are you controlling for this too?
  - Yes we are
- At many institutions, the surgeon can pick the anesthesiologist.
  - That is why we are looking at surgeon too but we are not nesting with surgeon and anesthesiologist
- What is your physiologist plausibly? Are you looking through blunt glass?
  - Sachin has another end of the grant that is looking at this. Does BP and glucose management matter? What is the right answer for BP and glucose management?
  - Even though a blunt glass, we should still be able to determine if anesthesiologist matter
  - There is a vigilance difference, that is Sachin's plausibility.
  - The only reason Sachin is going after this, is we do not know what might matter
  - Michael Avidan agrees with Sachin. Bill Shannon(?) who is with the stats department at Wash U has been looking at differences in centers and looks at wins, loses, and draw.
- Should you look at call cases? Emergent cases only? Would give you a much broader complication rate
  - Sachin said to do this as a sensitivity analysis. We could do an analysis on emergent cases only.
  - Maybe anesthesiologist matter only because it's an emergency situation
- How many variables can the model accept?
  - Another Monte-Carlo stimulation is going to be run to determine if we have adequate power

Vote:

Amsterdam - Non voting

Beth Israel - Non Voting

Bonn Germany - Non Voting

Cleveland Clinic - Non Voting

Colorado - Non Voting

Columbia - Accept with moderate revisions

Cornell - Non Voting

Florida - Non Voting

Mass Gen - Accept with moderate revisions  
Michigan - Accept with moderate revisions  
Oklahoma - Non Voting  
Oregon - Accept with moderate revisions  
Tennessee - Accept with moderate revisions  
UCSF - Non Voting  
Utah - Accept with moderate revisions  
Utrecht - Non voting  
Vanderbilt - Accept with moderate revisions  
Vermont - Non Voting  
Virginia - Accept with moderate revisions  
Wash U - Accept with moderate revisions  
Wisconsin - Non Voting  
Guest Speaker - U Penn - Non Voting  
Guest Speaker - Wake Forest - Non Voting  
**Overall Decision: Accept with Moderate Revisions**

### **Presentation:**

Title: Effect of Preoperative Antihypertensive Therapy on Intraoperative Systolic Blood Pressure Variability in Cardiac Surgery: Multicenter Perioperative Outcome Group Proposal

Proposed Authors: Jason Buehler, MD, Robert M. Craft, MD, Jerry Epps, MD, Sachin Kheterpal, MD, MBA, Roger Carroll, PhD, Carolyn Snider, MT, Taylor Buck, BS, Jason Johnson, BS

Primary Institution: University of Tennessee

### **Discussion Points:**

- Nathan Pace doesn't agree this is a study on variability in BP. It would be better to use descriptive words to describe what you are doing. Excursion out of the range perhaps. This is a time series and allows you a lot of other techniques
- What is the clinical relevance between BP and outcome?
  - Going forward it may not change what you are doing but it will allow you to prepare for potential complications
- Need to look to see what meds the patient may have taken that day.
  - Different institutions have different policies. With this database, it will be difficult to say if the patient took it
  - Some institutions stated that they hold specific meds the morning of surgery and some do not
- How to control for BP during bypass period?
  - Do you exclude the bypass period?
    - Michael Avidan suggests not excluding the BP.
    - Are there set excursions that matter?
      - There are small RCT's currently that have addressed this issue
    - Michael Avidan suggests to analyze the time on bypass separately

- How well are the drugs given during bypass documented? Which med is given which effect?
      - We may not be able to get this information. Therefore, is this a valid period to analyze?
      - Yes Michael Avidan said it still remains a valid period to analyze
      - If it's a big effect then you'll see it during bypass
- Should we be more homogenous and just do simple cardiac cases, just CABG?
  - Why?
    - The more homogenous we are the better.
    - Kevin Tremper suggests the more uniform procedure the better
- Should we exclude circ arrest, if we do not have enough power to just do CABG only?
  - You would want to power to a degree of excursion, that is clinically meaningful. Power the study based on endpoint and outcome
- You have the outcome that you control, and it may look good at the end but you can't control what it took to have a good outcome. Is there a better metric that you can add in such as amount of medication?
  - Look at the amount of "uppers" needed and amount of "downers" needed. Then can look at measured amount of meds needed for desired effect
  - After bypass, you need to know if you had a good surgical procedure. Should you look at a different procedure where the heart is not involved
- Can we look at all patients and types of surgery?
  - This will answer a different question and not specifically addressing the study hypothesis
- Do you exclude patients who are inpatient before surgery?
  - Compliance with meds is a big unknown
- Is this study worth going on without the mortality data?
  - Let's include 30 day mortality
- Need to adjust for ASA status
- Decided to include CABG, Valves but exclude circ arrest
- What is the primary outcome measure?
  - BP
- Need to do a new sample size estimate to see what is available in the database.

Vote:

Amsterdam - Non Voting

Beth Israel - Non Voting

Bonn Germany - Non Voting

Cleveland Clinic - Non Voting

Colorado - Accept with Moderate Revisions

Columbia - Accept with Moderate Revisions

Cornell - Non Voting

Florida - Non Voting

Mass Gen - Non Voting

Michigan - Accept with Moderate Revisions

Oklahoma - Non Voting

Oregon - Accept with Moderate Revisions  
Tennessee - Non Voting  
UCSF - Non Voting  
Utah - Non Voting  
Utrecht - Non Voting  
Vanderbilt - Non Voting  
Virginia - Accept with Moderate Revisions  
Vermont - Accept with Moderate Revisions  
Wash U - Non Voting  
Wisconsin- Non Voting  
Guest Speaker - U Penn - Non Voting  
Guest Speaker - Wake Forest - Non Voting  
**Overall Decision: Accept with Moderate Revisions**

**General Issues:**

Potentially on the MPOG website set up an electronic survey of when drugs are held and other commonly entered or not-entered items for other institutions to review prior to writing a proposal

Plan to hold another annual MPOG retreat on the Friday before ASA 2013

Is there a community forum discussion board?

Yes we can add in a conversation board on the new website. Several threads will be set-up