

**Multicenter Perioperative Outcomes Group (MPOG)
PCRC Meeting Notes – Monday, November 13, 2017**

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 no changes
 - b. Accept with minor changes send revision electronically
 - c. Accept with major changes and represent at PCRC
 - 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.

Attendance:

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|--------------------------------|--------------------------------|
| Michael Aziz (Oregon) | Bhiken Naik (Virginia) |
| Joshua Berris (Beaumont) | Nathan Pace (Utah) |
| Dan Biggs (Oklahoma) | Nicole Pescatore (Michigan) |
| Ruth Cassidy (Michigan) | Karen Posner (Washington) |
| Douglas Colquhoun (Michigan) | Leif Saager (Michigan) |
| Karen Domino (UWash) | Nirav Shah (Michigan) |
| Robert Freundlich (Vanderbilt) | Amy Shanks (Michigan) |
| Shelley Housey (Michigan) | Allie Thompson (Michigan) |
| Leslie Jameson (Colorado) | Kevin Tremper (Michigan) |
| Sachin Kheterpal (Michigan) | Robert Schoenberger (Yale) |
| Anna Nachamie (Weill Cornell) | Jonathan Wanderer (Vanderbilt) |
| Jill Mhyre (Arkansas) | |

Announcements:

- 120 attendees at this year's MPOG retreat
- Post-MPOG retreat survey will be sent out this week for feedback
- New MPOG website and logo – www.mpog.org
- Twitter account @MPOGAspire
- Over 8 million records in MPOG as of last week
- IARS 2018 Annual Meeting, April 28 – May 1, 2018 in Chicago, Illinois
 - o Abstract deadline: Dec 28th
 - o Please let us know if you plan on submitting an MPOG abstract
 - o MPOG networking event at the IARS – trying to finalize the venue and day/time
- EOS one-month follow-up complete – please continue entering data from baseline and 1-month phone calls

Clinical Trials Network / Call for Letters of Intent discussion:

- Call for proposals located on the research tab of the MPOG website – Clinical Trials Network
- Support from academic chairs to commit resources to building a Clinical Trial Network
- Formal announcement will be released in multiple society newsletters
- **LOI due December 31st to IARS**
- Guidelines: prospective, pragmatic (applicable across multiple centers in real-world setting) and submitted to NIH study section for external funding
- Recommending perioperative-related submissions
- Proposal should include outline of what infrastructure you plan to use – MPOG, Duke Clinical Research Institute (DCRI)
- Does not require participation as a contributing member in MPOG to submit the LOI
- If planning to use MPOG infrastructure, email Sachin or Leif

PCRC 0046 - Risk Factors for Perioperative Hypoglycemia in Children and Adults: A Report from the Multicenter Perioperative Outcomes Group (MPOG)

Principal Investigator: Lori Reigger, MD

Institution: University of Michigan

Discussion/Questions

- Q: When are you capturing glucose values?
 - A: Only in perioperative period – 1 hour before anesthesia start and 2 hours at end of anesthesia start
 - A: Doesn't matter if it's home or hospital value, just matter if they have one.
- Q: How to manage hand-entered values? How do you define a valid hand-entered glucose value?
 - A: For single-center study, we dand reviewed all values <40, only 1 was erroneous.
- Comment: Among adults, potential for treatment effect with each glucose check - marginal structural modeling. Need to build in casual inference to account for treatment in between glucose checks.
- Q: What triggers POC glucose in a child?
 - A: Not trying to find incidence of hypoglycemia; trying to find if they had it, then why do they have it.
 - A: Yes, patients that are checked will be biased toward having hypoglycemia.
- Comment: Pick a sample of patients that do not get a glucose measurement and describe them, as well. That way you can compare the descriptive statistics across those two groups.
- Comment: Potential confounder that you may be doing shorter cases on younger babies.
- Q: Is it feasible to have each institution review glucose values under 20?
 - A: Can be reviewed at MPOG central from anesthetic record.
 - A: Institutions may have waiver for this type of data.
 - A: May be able to apply some logic around treated vs. not treated to capture erroneous values.
 - A: Devices have ranges of values they can capture - may be able to use those ranges to determine erroneous values.
- Q: Why are you limiting covariates in the model?
 - A: One part is validating single-center findings.
 - Comment: Penalized regression may be an option to address potential collinearity among variables.
 - Comment: Consider quantile regression of glucose values rather than arbitrary cutoff to examine range of observed values.
- Comment: ~34,000 cases with intraoperative glucose values across ~600,000 pediatric cases in MPOG
- Comment: Preop glucose/preop hypoglycemia variable is needed.
- Comment: ASPIRE measure Glucose 02 uses <60 as cutoff value.
- Comment: Plan is for 2 separate papers.

FINAL DECISION: Accept w/electronic revisions

| Institution | Vote |
|--|--------------------------------------|
| Academic Medical Center (AMC) Amsterdam | N/A |
| Beaumont | N/A |
| Bronson | N/A |
| Children's Hospital of Orange County (CHOC) | N/A |
| Cleveland Clinic | N/A |
| Columbia | N/A |
| Henry Ford | N/A |
| Holland | N/A |
| Memorial Sloan Kettering | N/A |
| NY Langone | N/A |
| Oregon Health Science University | Accept w/electronic revisions |
| St. Joseph/Trinity | N/A |
| Sparrow | N/A |
| Stanford | N/A |
| University Medical Center of Utrecht | N/A |
| University of Colorado | Accept w/electronic revisions |
| University of Michigan | Abstain |
| University of Oklahoma | Accept w/electronic revisions |
| University of Pennsylvania | N/A |
| University of Tennessee | N/A |
| University of Utah | Accept w/electronic revisions |
| University of Vermont | N/A |
| University of Virginia | Accept w/electronic revisions |
| University of Washington | Accept w/electronic revisions |
| Vanderbilt | Accept w/electronic revisions |
| Wake Forest | Accept w/electronic revisions |
| Washington University, St. Louis | N/A |
| Weill-Cornell Medical Center – New York Presbyterian | N/A |
| Yale | Accept w/electronic revisions |