PCRC Meeting Notes – March 19, 2012

Attendees

Michigan: Sachin Kheterpal, Kevin Tremper, Amy Shanks, Tory Lacca, Rob Freundlich, David Healy

Vermont: Alex Friend and Bill Paganelli

MGH: Brian Bateman and Matthias Eikermann

Columbia: Mitch Berman

Tennessee: Jerry Epps

Colorado: Anna Fernandez-Bustamente

OHSU: Mike Aziz

Utah: Nathan Pace

Santa Barbara Cottage Hospital: Marco Navetta

Wash U: Dan Helsten (may attend)

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.

Presentations:

Title: Incidence, predictors and outcome of difficult mask ventilation combined with difficult laryngoscopy

Proposed Authors: Sachin Kheterpal MD, MBA, David Healy, FRCA, Michael Aziz MD, Amy Shanks, MS, Robert Fruendlich, MS, MD, Ana Fernandez-Bustamente, Leslie Jameson, Kevin K. Tremper, PhD, MD

Primary Institution: Michigan

- Sachin Kheterpal presented the research protocol for Michigan

Discussion Points

- Sites will full airway exam are the Centricity sites. Will only use these 4 sites for the time being
- Center effect will be incorporated into the model as well
- Target journal is JAMA and if rejected Anesthesiology
    - Perhaps critical care medicine journal?
- How do you handle video laryngoscopy? Include/exclude?
    - This was not addressed during this conversation
- OHSU may not have all the data elements in table 1 but should have many of them
    - Sachin: data fill rates will be reported
- Create a validation dataset?
    - If we have enough events we could easily do a derivation/validation dataset
    - Proposed 240 events would not currently allow for a validation dataset to be derived
    - Add to the methods that if the event rate is high enough we will do a derivation/validation dataset
- Why not use predictors of difficult intubation?
    - Sachin's hope is that his table 1 is that list and reviewed it with the group.
- Hypothesis is Mallampati, jaw protrusion, sleep apnea and thick neck are predictors of the outcome
    - Sachin will add this to the protocol
- Sachin will confirm that the 4 sites have the correct data for the outcome
- Sachin will clarify the intention of the proposal
- Perhaps develop a score depending on the audience of JAMA and friends (non-anesthesiologist): limit to just data available in H&P and that will attract a greater number of people interested. Just using data available in the medical record can predict bad outcomes and these patients must be presented to airway management expert first.
- How can we get the other sites to be able to contribute data?
    - Sachin will email and ask what other co-morbidities may be of interest in predicting the outcome. Perhaps for the more general audience more sites can then participate.
- Need to figure out if you are doing two predictions model and you are comparing them?

Vote:

Michigan: Accept with minor revisions

OHSU: Accept with minor revisions

Colorado: Accept with minor revisions

Tennessee: Accept with minor revisions

MGH: Accept with minor revisions

Vermont: Accept with minor revisions

Status: Accept with minor revisions

Presentations:

Title: Rescue of failed direct laryngoscopy. An analysis of the performance of rescue techniques during difficult airway management: Results from the multicentered perioperative outcomes group.

Proposed Authors: Michael Aziz, MD, David Healy, MD, MRCP, FRCA, Amy Shanks, MS, Ansgar Brambrink, MD, Sachin Kheterpal, MD

Primary Institution: OHSU

- Mike Aziz presented the research protocol for OHSU

Discussion Points

- Are groups inclusive of research methods?
    - Question: Bougie considered a stylet?
        - It would fall into one of the other categories
    - Question: Categorize video optical stylet differently?
        - Yes we could split it out as its own category
- Is this impactful enough? Would this be of value? Target journal of Anesthesiology
    - One person thinks the main question of interest is which health care provider uses what technique under what condition
    - When "it's hitting the fan" and the sats are in the 80's then what is the right thing to use?
        - That would be a great study question to answer but difficult to answer with this type of data
        - No way to determine how bad the DL was but rather that they just abandoned it

    - To get this published in Anesthesiology, we need to develop an *impact…….*need to tell people how this will change practice and have a clinical impact. Need to find something that changes people's behavior
- Are you going to look at sat's falling and sat's level?
    - Mike didn't think this was relevant here because it's very difficult to tell
- Do you have a way of determining which devices are available?
    - No we do not
- Are you going to look at airway classification as difficult or hard? If difficult or hard, may have devices in the room to start.
    - Mike doesn't think we can rely on the dataset for this.
    - Hard to tell if the anesthesiologist had advanced airway devices in the room
- Skeptical of inferences to be made about the superiority of one technique of another because the protocols, experience and devices vary so much between institutions. Perhaps just show distribution of patterns of what is being used?
    - Mike agrees to this statement that this is a better way to determine optimum strategies
    - Sachin thought this is a great study to add to real world data. We could look at patients with several risk factors and then state the data about which technique was used.
        - Perhaps stratify by year (or small groups of years)
        - May identify trends over time
- Can every site contribute to text searching and then hand review if DL was performed prior to rescue technique or a note for teaching technique. Will need to work with individual sites for mapping issues as well.
    - Vermont has airway exam in H&P. Doesn't grade the airway in the "Han scale"
    - MGH can look at preop consent form that has airway exam manually. Not all the elements are pre-specified. This is not electronic but would be a paper record. Sachin thinks MGH would be limited to intraop data only
    - Columbia: For recent cases has H&P electronically. Intraop has mallampati and that would be it.
    - Tennessee: has H&P information in preop clinic and DOS for airway information in about 85% of the cases
    - Colorado: Full H&P airway exam
    - OHSU: Full H&P airway exam
    - Michigan: Full H&P airway exam
- How do you document that you used an attempt for teaching?
    - Some sites say that it's for teaching
    - These would be excluded anyways
- Sachin will send to the group the "Han Scale" for the group to review so everyone can communicate in the same language.
- Risk prediction in this dataset is not possible in this dataset at this time because it would read "dirty" at this time

- Will take commitment from each site to contribute to this study. At the end of extraction, the site's PI will have to go into the record to figure out what happened.
    - Each site has the opportunity to be added as a co-investigator to look at the central MPOG database to go through the manual record. If you do not have time, that's fine. If so, you are welcome to join the study. Open to junior staff.
        - Tennessee: May have faculty that could join and help
- Look at hospital and provider as fixed or random effects. This will be planned once looking at the data descriptively first.
    - Restructure the protocol to include center and provider effects
- Need to clarify on what other devices need to be added to each group.
    - Please email Mike and Sachin thoughts on which devices go to which group.
- This analysis will help structure the MPOG database on how we document the airway variables
    - Sachin will send out a MPOG recommended "intubation" document
- Perhaps focus on some sort of outcome?
    - Look at intubation in ICU
        - We cannot do this
    - Can look at not extubated in OR
        - We can do this

<u>Voting</u>

Michigan: Accept with moderate revision

Vermont: Accept with moderate revision

MGH: Accept with moderate revision

Columbia: Accept with moderate revision

Tennessee: Accept with moderate revision

Colorado: Accept with moderate revision

Status: Accept with moderate revision

General Discussion Elements

- Status update: writing routines to extract data from last proposals from last meeting
    - Sachin will send out a document that will be a commonly used variables that are routinely pulled
- Will come up with standard definitions of concepts and send to the group for review
- Annual meeting outside of ASA?
    - Perhaps in fall or late summer in Ann Arbor, Michigan
    - Chairs have been willing to fund sending PI's to Michigan
    - The group felt it was a good idea
    - Sachin will send out several proposed dates
        - Should we do the meeting a day prior to a national meeting?
- Please send contracts/grants contact to Amy Shanks (amysha@med.umich.edu) or Tory Lacca (lacca@med.umich.edu) to execute outgoing DUA. Each site has a valid incoming DUA executed.
- Standing meeting second Monday of each month. If no proposals may be every other month.