Minutes for MSM 2017 Breakout Session

Date: March 22, 2017
Time: 1:00 PM EST
Location: Natcher Building, National Institutes of Health

Means: In person meeting

Attendees

42 showed interest during registration, 13 attended.

- Brian Colder
- Jerry Day
- Ahmet Erdemir (Co-Chair)
- Jason Haugh (MSM Steering Committee)
- Marc Horner (Vice Co-Chair)
- Joy Ku (Executive Committee Member)
- Jason Halloran
- Donna Lochner (Advisory Council Member)
- Tina Morrison (Executive Committee Member)
- Lealem Mulugeta (Co-Chair)
- Pras Pathmanathan (Advisory Council Member)
- John Rice
- Herbert Sauro

Highlights

Goals

1. Developing and adapting guidelines and procedures for credible practice of M&S in healthcare,
2. cultivating consistent terminology,
3. demonstrating workflows for credible practice, and
4. promoting credible practice

Structure

Executive Committee (10 members) - hands on activities
Advisory Council (12 members) - for feedback

Breakout feedback

• Progress:
  ○ 2 webinars
  ○ 6 conference posters/presentations
  ○ 2 manuscripts in progress
  ○ Ten "Not So" Simple Rules Poster at #1
Theme 6: Session on Model Credibility Plan(s)

- Leadership transitioning mechanism is in place (Vice Co-Chair positions); volunteers are always welcome.
- Members are sought after. DISCLAIMER: Up to 8 hours of effort level per month is expected.
- The need for establishing clarity in terminology is pressing.
  - Glossary needs to be revived (see the Committee wiki).
  - High priority terms will be defined in manuscripts
- Interest in documenting M&S workflows - need contributions from other working groups

Notes

1. **Introductions.** The session started with the attendees introducing themselves.

2. **MSM Steering Committee perspective.** Jason Haugh provided the role of the MSM Steering Committee to establish accountability with the Working Groups and provided his view of Committee activities. Jason noted that the Steering Committee would like to assess Working Group operations, if there is a need to change the Working Group or consolidate it with other Working Groups, how the leadership and membership works. A response to a survey in this regard was sent to him by the Co-Chairs before the meeting. Ahmad also provided the survey response as a report in the IMAG wiki. Jason noted that the MSM Steering Committee will meet and provide their opinions based on this information and Jason's observations in the breakout session. His personal impression is that the Committee has well-defined goals, strong leadership, and a lot of activity.

3. **Summary of the Committee.** Lealem provided a description of the Committee, its history, and its motivations. The Committee started as an IMAG initiative and initially was not designed as a Working Group. The leadership is not necessarily U01 awardees. The membership is by invitation or nomination, specifically focusing on the motivation to do active work for the Committee. The Committee is formed by an Executive Committee and an Advisory Council. The Executive Committee is more hands-on, commonly requiring up to 8 hours of effort level per month, Advisory Council is more designed to acquire intellectual feedback on Committee operations and requires less effort level.

4. **Overall progress on Committee activities.** Ahmad went over the progress report, which started discussion on anticipated Committee operations and activities (notes below).

5. **Progress on manuscripts.** Pras asked about the progress on the Committee papers. Ahmad noted that two manuscripts are under development, albeit the progress had been slow. The first one is Ten Simple Rules for Credible Practice - Committee Perspective. The drafts of Introduction and Discussion needs to be written by Lealem and Ahmad respectively. Other relevant sections were completed and the draft is available in the source code repository. Tina volunteered to work on the manuscript throughout MSM meeting. The group also agreed on incorporating the example Lealem used for the MSM 2017 poster to demonstrate strategies to respond to Ten Simple Rules. The group also agreed to provide definitions of high-priority terms (credible, model) as part of that manuscript as a segway to glossary activity (also see notes below). The second manuscript will be based on survey data to establish Ten Simple Rules Community Perspective. The data has been analyzed. The analysis needs to be wrapped up to start drafting the manuscript. Jason also mentioned that the MSM Steering Committee is interested in two articles =by contributions from all working groups - one for modelers, the other for non-modelers. These articles may be a good venue to cite the manuscripts on Ten Simple Rules.

6. **Leadership.** Ahmad and Lealem are interested in transitioning the leadership. When the Committee was founded, term limits on co-chairs were placed. The reason for this was twofold; to bring new energy to the Committee and to prevent Co-Chairs bias and comfort influence the Committee's direction. The Committee has established a Vice Co-Chairs position to assist with the transitioning process, i.e. to familiarize with the mechanics of the Committee and its overall goals. Currently, Marc Horner is a Vice Co-Chair and it is likely that one of the new members will be asked to fill in the other position. There is no set timeline; the leadership transition will depend on who steps up and when. Lealem proposed to
look into it in June, 2017.

7. **Membership.** There was inquiry made on the requirements and expectations of the Committee members or those who want to become members. It was explained that the membership is comprised of individuals both from the MSM community and those who are not in that community. Yet, they all are expected to have in modeling and simulation and its credibility. The membership is also quite multi-faceted with respect of discipline and industry/academia (also see notes on Summary of the Committee).

8. **MSM 2017 Session on Credibility Plan(s).** The Committee is moderating Theme 6 session on Model Credibility Plan(s). It is hoped that the awardees will have a chance to present their approach to credibility of their processes and get feedback from the Committee and session attendees. There are 11 awardees and all are asked to provide their Credibility Plan and presentation on the wiki. The Committee is planning to document the discussions and draft a summary of the experience.

9. **M&S terminology.** The participants had long discussion on modeling and simulation terminology in regard to achieving clarity in the broad community. This is a charge of the Committee and the Committee has started a glossary activity. Unfortunately, the activity did not have much traction possibly due to enormity of the problem and the required workload. Tina suggested to connect the Committee with the FDA’s modeling and simulation workgroup to assist with this effort. The group also agreed to approach this problem by first defining key terms in upcoming manuscripts (see discussion above) as a starting point. Lealem also noted the possibility to introduce this glossary to the medical dictionary of national library. Ahmet also noted the manuscript effort led by Tony Hunt to understand differences between mechanistic models, models of mechanisms, and model mechanisms.

10. **Documenting Workflows.** A while ago, as part of the Committee activities, Tony Hunt has started an initiative to document modeling and simulation workflows in different disciplines to identify overlaps and differences. At that time, Tony, Ahmet and Lealem provided documentation on the modeling and simulation workflow of their respective disciplines. Tony also reached out to other Working Group leads to request workflow documentation for specific disciplines of the Working Groups. He has not received any feedback. The Committee agreed to ask the MSM Steering Committee to follow up with Working Groups to revive this activity.