Simulation Committee Meeting Minutes

Date: 7/16/18, 5pm-6pm

Attended:

Jennifer Calzada (Sim Center Director) jcalzada@tulane.edu

Dr. Chris DuCoin (Surgery; Sim Center Medical Director) cducoin@tulane.edu

Dr. Jessica DeBord (Foundations in Medicine)

Dr. Mary Mulcahey (Orthopaedics)

Dr. Jonathan Weed (Anesthesiology)

Dr. Jim Caridi (Radiology) Tyler Jarrett (T4 student) Kayla Iuliucci (T2 student)

Meeting Summary:

(DuCoin) Introduction to Committee, purpose and charter.

Committee starting with medical school departments as a working group to discuss ideas and projects. Eventually hope to incorporate other related University departments, especially BioMedical Engineering. Plan for it to be a working group for projects, courses, and ideas. If you don't get anything out of it, you don't need to come. Or come back when you have ideas on where you can utilize simulation for education or research.

Introductions around the table of Attendees.

(Calzada) Capabilities of the Sim Center.

- Sim Center equipment (File link listed under 7/16/18) gives a highlight of equipment we have and the general capabilities. List is not exhaustive. Most definitive way to know if we can train on a specific skill is to ask and we can let you know and what level of learner it is appropriate for from T1s to Fellow and practicing professionals.
- New equipment ideas should go to Jennifer (icalzada@tulane.edu). Some items can be funded by the Sim Center, depending on total cost and if it applies to a wide range of specialties and levels. The more specialized equipment is, the more likely it must come from a department's budget, but the Sim Center will house and cover the cost to maintain and general upkeep. Funding for equipment can come from department budgets, grants, foundation proposals, or even donors within a specialty. Jennifer routinely works with Development on proposals, grants, and pitches to donors and we can do much of this upfront work for you if you just ask. We have already been successful with this and a \$25k equipment purchase for Anesthesiology with funding from a foundation in 2017.
- **BME Lab for modeling**. New to the Sim Center in the last two years and funded by a grant from the University is a biomedical engineering modeling lab. The Sim Center has BME interns each summer and starting this year, during the school year as well. Their sole task is building models and basic task trainers that are requested by us or by any department or course. If you know of any basic task trainer models from your associations or other institutions, get with us and we might be able to replicate them.
- **3D Printing**. New in 2018, the Sim Center has both a 3D printer and 3D scanner. Our two current interns are very adept at 3D printing and have already started printing various items, for example, spines to make new LP models. If your department has any 3D printing needs, get with us and we may be able to help. The one area we currently cannot accommodate is personalized medicine 3D printing from MRIs for abnormal anatomies. We have the printing capability, but there is a middle step where someone with anatomy proficiency must edit the MRI file to remove any anatomy that is not going to be part of the print job. If you can outsource that step, we can handle the printing. We also hope in the future to have the capability to print malleable models that can bleed.

(Calzada) Creating training for the Sim Center

- How do you know where to start with training? Start by reaching out to Jennifer and the first question to answer is what do you want to teach? What skill? What procedure? The Sim Center staff is here to help you through this process and once we identify that we have the capability. We will meet with faculty and create a curriculum to achieve your learning objectives related to the specific skill or procedure. Training will be different depending on the level of your learner. You have the subject matter expertise, we have the simulation expertise and together can create a course plan for any level learner.
- **Web-based curriculum planning**. We are working on a website that will allow any faculty to select any procedure or skill and it will step you through the process of how it can be trained at the Sim Center.
- Facilitation. Manpower to run sessions is a frequent roadblock. There are options to help with this. Faculty facilitating is the ideal, but not always possible. Residents can be used to train interns or medical students and T4s can be used to train more junior medical students. As long as a facilitator is more experienced than the learner, they can be briefed to facilitate.
- Assessments of skills. Assessing skills at the Sim Center is the goal, so you know that training
 was effective. Assessments also require manpower. Relying on residents or T4s is also an
 option. If an assessment can be made objective, the Sim Techs can be trained to have inter-rater
 reliability to faculty to help run assessments (they already do this for some surgery). Peer review
 can also be used for assessments, but again the rubric must be objective. Anything in the Sim
 Center can be recorded and all recordings can be made available in a web-based system to
 faculty. Assessments can be done after the fact by video review.

(Mulcahey) How is the Sim Center already used for the med students?

- Passed out an Excel chart of all clinical skills taught to medical students during FY17-18. Email jcalzada@tulane.edu for a copy (due to confidential information this cannot be posted).
- **Bootcamps**. Run one in Surgery for Honors Surgery and for Interns. It's a 2-day course that is aimed at people in general surgery. Bootcamps are also being run in OB-GYN and Pediatrics for T4s before they graduate and for new interns in June or July.

(Mulcahey) Does the Sim Center have videos or books for trainings?

- Procedure videos for students. The Sim Center has large number and all are saved on Sim Center YouTube channel. Any that departments have can be added. The Sim Center is adding several more flat screen TVs in sim areas this summer and all with have AppleTV connected to allow AirPlay of any video (or presentation) from an iPhone or iPad. The Sim Center keeps about a dozen iPads that facilitators can utilize during any session. Students can AirPlay any procedure video to a TV when they are practicing. Additional resources are available through the Matas Library, such as WiseMD. The NEJM also has a large collection of procedure videos and guides.
- The Sim Center keeps a generic procedure Box.com folder for faculty or facilitators to send us any videos, presentations, procedure guides to be utilized during any session. That way it's here and can be pulled up on any of our iPads or laptops. Ask Jennifer how to email your information directly to a folder for a course.
- Videos are best for facilitation demos. Courses that are run frequently often have different facilitators and they may do procedures slightly differently. Initial demonstration of a procedure by video gives more consistency across sessions.

(DuCoin) Future meetings

- Will hold future meeting dates quarterly. Future dates for AY 2019 will be (all Mondays from 5-6pm) October 15, January 16, and April 15.
- Use this committee as a way to hear what other specialties do, you don't need to recreate the wheel.

(Calzada) Simulation by specialty

- Surgery runs orientation on first day of clerkship. Honors surgery does a bootcamp. Residents
 come train on specific procedures. Professional level courses are run and any profit is held for
 Surgery to use for equipment purchases.
- Anesthesia runs resident training scenarios weekly. We are currently applying to be endorsed to run professional MOC session that will also raise some funds for anesthesia purchases.

(DuCoin) Teach the teacher courses

- These are another option to run professional courses to teach practice expansion on highly specialized cases.
- If we are capable of teaching these in simulation, we can consider running a course that could help promote your department and also raise small funds for equipment.
- The Sim Center can also help you coordinate sessions that may involve multiple departments, such as simulation, SPs, vivarium, anatomy lab, or CME department. We can help you coordinate.

(Tyler) **T4 thoughts on simulation**

- How do we expand some of these session to more students, even those outside of the sub-ls.
- Students would be interested in more sessions that teach soft skills. Sessions that allow them to practice clinical decision making in real time and get feedback.
- Peer to peer education was effective, what other ways can this be utilized outside of surgery.
- Video training could be a barrier. Students are not as comfortable watching a video on their own and then practicing on a manikin unsupervised. Everyone agreed this is not an effective method of teaching, facilitation is a key part of the learning.

(Kayla) T2 thoughts on simulation

- Interested in developing new ideas that can be done in FIM.
- Some equipment needs to be upgraded and some task trainers need to have replaceable parts updated more frequently.
- (Weed) Equipment is not the main determination of success of simulation, having the right facilitator is the most important factor. Expert instruction is key.
- (Calzada/Weed) Framing simulation. Students need to be sent to the Sim Center with the right focus for what they are supposed to learn. Students are most often learning the process of the steps and decision making, not mastering the actual procedure.

(Caridi) How do I use the Sim Center.

- Start with Jennifer to use the Sim Center. We can start with a tour (if you need it) and discussion of what applies to your specialty. We can then set up curriculums or self-guided practice (more appropriate at resident level).
- Courses must be scheduled. Self-guided practice does not have to be scheduled, but you run the risk that it is being utilized when you show up.
- Scheduling can always be done by emailing jcalzada@tulane.edu or simcenter@tulane.edu.

FUTURE MEETING DATES:

Monday, October 15, 2018 @ 5-6pm Monday, January 16 @ 5-6pm Monday, April 15 @ 5-6pm