Guidelines for use of the MUSC Healthcare Simulation Center

Rev. January 22, 2018
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Section 1. Governance

1. Mission Statement

The MUSC Healthcare Simulation Center (MUSC-HSC) provides an interprofessional, simulation-focused learning environment to 1) enhance the education of healthcare professionals, and 2) improve the provision of safe, comprehensive healthcare across the MUSC enterprise.

2. Vision Statement

Our employees are committed to providing the highest-level service to all members of the MUSC community. We strive to be recognized, not only for supporting innovative learning strategies, but also for creating a welcoming, supportive environment for all faculty, staff and students.

3. Value Statement

We adhere to the MUSC core values: compassion, innovation, collaboration, respect and integrity.

4. Steering Committee

The MUSC-HSC Steering committee consists of representatives from the MUSC enterprise.

Steering committee members’ responsibilities include:

- Guiding the strategic direction for the MUSC-HSC
- Identifying and prioritizing simulation needs across the MUSC enterprise, including course development, equipment, and other resource allocation
- Mentoring potential simulation course directors and facilitators
- Approving guidelines for use the MUSC-HSC

Current members of the MUSC-HSC Steering Committee are listed on the website at www.musc.edu/simulation.
Section 2. Operations

1. Hours of Operation

The normal operating hours of the MUSC-HSC are 7:30 AM – 5:00 PM, Monday - Friday. The MUSC - HSC is available before or after regular business hours with advanced notice for approved activities.

2. Contact Information

General

MUSC - HSC staff work in a coordinated effort with a focus on customer service, transparency, and efficiency. All personnel can be approached via telephone, email, or in person to assist with any service-related questions, comments, or concerns. However, depending on the request or inquiry, written documentation may be requested.

Email: simcenter@musc.edu
Main phone (843) 792-1459

In Room Support

For immediate in-room support during a simulation activity contact a Simulation Specialist through one of the following methods, which are listed in order of preference.

- Typing “help” into the Instant Message application on the control room computer. These messages will appear on the Simulation Specialists’ cell phones identified by the corresponding room. Instructions are posted in each MUSC-HSC room
- Calling or texting one of the cell phone numbers posted in each MUSC-HSC room.
- Calling the main phone number, (843) 792-1459.

3. Center Floor Plan

An interactive floor plan with room descriptions is located on the MUSC-HSC website at www.musc.edu/simulation.

4. General Rules

Cell Phone Use

Cell phone use is discouraged in the MUSC – HSC. Call should be limited to those that are necessary. Facilitators will determine cell phone use policies for their specific activities.

Sign in/Confidentiality/Consent

All facilitators, participants, and visitors to the MUSC SC are required to sign in using the kiosks located in the lobby near the front desk. This sign in process includes a standard confidentiality statement, consent for videography and photography, and latex warning to be acknowledged by all participants and observers prior to any activity within the MUSC – HSC.
Viewing of recorded materials by individuals who were not involved in the simulation activity requires a written release by those participants and observers who are identifiable within the recording.

**Conduct**

All MUSC - HSC employees, facilitators, participants, and visitors are expected to exhibit professional decorum and sensitivity to participant responses to simulations. The MUSC-HSC is an educational environment with many different users. Center users are expected to be courteous of all other users, taking care not to disturb other simulation activities.

MUSC - HSC users should contact the HSC Director in SN112G or by email to report a problem involving HSC personnel. Depending on the severity of the claim, a written description of the problem may be requested in order to formally investigate the issue. All issues will be addressed and resolved within a timely manner.
Section 3. Personnel

1. Organizational Chart

MUSC - HSC Steering Committee

Donna Kern, MD
Medical Director
Executive Associate
Dean COM

Frances Lee
Director

Vacant
Business Manager

Kathy Clayton
Administrative Assistant

John Walker
Simulation Technology Manager

Andy Novak
Simulation Specialist

Sam Torres-Rosado
Information Tech Coor

Richard Funches
Simulation Specialist

MUSC Healthcare Simulation Center
Org Chart effective January 1, 2018
2. Simulation Center Staff Roles

**Director:** The director is responsible for directing all aspects of the center and working with the steering committee to implement strategic plans to meet its mission and adhere to its core values.

**Administrative Support Team:** The center’s administrative, budgetary and financial functions are responsibilities of the Business Manager. The Administrative Assistant reports to the Business Manager. The **Administrative Assistant** serves as the receptionist for the center, overseeing all sign in and welcoming functions.

**Technical Support Team:** The **Simulation Technology Manager** oversees all aspects of simulation course implementation and support, including simulator care and maintenance. The **Simulation Support Specialists**, whose primary duties are to setup and take down equipment for simulation activities, as well as support faculty and staff during simulation events, report to the Simulation Technology Manager. The **Information Technology Coordinator** (ITC) also reports to the Simulation Technology Manager. The ITC provides desktop simulation computer, and BLine support.

**Development Support Team:** The **MUSC –HSC Director** works with a wide variety of subject matter experts to develop simulation-based learning activities. The **Administrative Coordinator** reports to the Simulation Development Manager and is responsible for coordination of all simulation development and scheduling processes.
Section 4. Simulation Activity Development

1. Simulators

A current list of available simulators, ranging from simple task trainers to high fidelity manikins, is located on the MUSC-HSC website at www.musc.edu/simulation.

Users interested in arranging a demonstration or receiving additional information about simulators or related equipment and software should contact the center at simcenter@musc.edu.

MUSC HSC encourages facilitators and other Subject Matter Experts to submit requests for simulators, as needed. While there is no guarantee that requests can be fulfilled immediately. The MUSC HSC maintains a “wish list” of simulation equipment. Final selection of simulation equipment is approved by the MUSC HSC steering committee. The Equipment Request form is attached to this manual as Appendix A.

2. Development Process

The general course development process is outlined below. Note: a project management online site, JIRA, is used by MUSC HSC to manage and track all course development.

I. Pre-Development Phase
   A. Subject Matter Expert (SME) contacts the MUSC – HSC.
   B. SME meets with MUSC-HSC Director or designee.
      1. Lead SME is identified.
      2. Lead SME completes Initial Simulation Activity Development Form online, if not already completed. Note: This form is located at www.musc.edu/simulation.
      3. MUSC-HSC Director reviews the request to determine:
         • Is this feasible?
         • Has this or something similar already been developed?
         • Are there adequate resources (time, equipment, space) to support it?
         • Has the financially responsible unit been identified and confirmed?

II. Development Phase
   A. MUSC-HSC Director identifies the members of the Development Team and Development Team Leader for approved simulation activities, based on the initial meetings.
   B. Lead SME and Team Leader clarify expected outcomes.
      1. Lead SME completes the appropriate simulation development documentation and writes specific learning objectives.
      2. Team Leader discusses and clarifies expected outcomes with the Lead SME
         • matching objectives to the audience,
         • matching activities to stated objectives,
         • selecting appropriate simulators,
         • discussing potential logistics, and
• identifying a development timeline.

C. Lead SME initiates scheduling planned activity.

D. Development Team, in consultation with Lead SME, designs the proposed simulation experience. Considerations include:
   1. Individual vs. group vs. team,
   2. Summative vs. formative
   3. Novice vs. expert
   4. Available facilities
   5. Available equipment
   6. Available time
   7. Number of students
   8. Number of facilitators
   9. Needed moulage and other enhancements
   10. Programming considerations
       • No programming required
       • Single scenario vs. set of scenarios
       • Graded vs. non-graded

E. Team Leader or Simulation Programmer programs scenarios, as needed.
   1. Development Team conducts clinical and technical reviews of scenarios.
   2. Lead SME conducts pilot test of scenarios.
   3. Simulation Programmer makes final modifications as needed.

F. Team Leader creates facilitator guides and other supporting materials, as needed.
Section 5. Simulation Activity Implementation

1. Training Requirements

Facilitators are required to be adequately trained prior to using MUSC - HSC equipment. Training is arranged using simcenter@musc.edu.

2. Scheduling Process

The MUSC – HSC serves the entire MUSC enterprise. In general, all resources, rooms, equipment, support personnel, are reserved on a first come-first served basis. In cases where equipment may be housed at the center but owned by a stakeholder, the owner will have priority use. The owners will also have the right to approve use of their equipment by others.

A daily calendar of scheduled MUSC – HSC events is available at www.musc.simulation.

General Scheduling Process

I. New Activity Request (for approved activities. See 3.2 for Initial Development Steps)
   A. Lead SME or designee works with the Lead Developer to complete the online New Course Request the first time an activity will be scheduled. This form is found at https://academicdepartments.musc.edu/simulation/forms/newcourse.htm
      • This form will be used to set up the equipment, room and peripherals for the scheduled activity. It is critical that this form be complete and accurate.

II. Subsequent Activity Requests
   A. Lead SME or designee submits the online Existing Course Request form for each subsequent time the activity will be scheduled. This form is found at https://academicdepartments.musc.edu/simulation/forms/index.html
      • This form will be used to set up the equipment, room and peripherals for the scheduled activity. It is critical that this form be complete and accurate.
      • Requestors needing assistance completing the form should work with the identified MUSC – HSC Development Team leader or simcenter@musc.edu.
   B. Lead SME or designee submits the online Existing Course Request form for each subsequent time the activity will be scheduled. This form is found at https://academicdepartments.musc.edu/simulation/forms/index.html
   C. The Requestor returns the revised set-up document to MUSC – HSC.

III. Scheduling
   A. MUSC – HSC will schedule the requested activity upon receipt of a completed Existing Course Request Form.
   B. Changes to the activity set-up, etc.
      • After a simulation activity is approved and scheduled any changes must be requested and documented using a Change Request Form found at https://academicdepartments.musc.edu/simulation/forms/insitu.htm
C. Cancellations
   • A cancellation notice is requested at least 24 hours before the scheduled simulation date if possible. Consideration is given for emergencies and other unforeseeable circumstances requiring cancellation. MUSC-HSC reserves the right to charge responsibility centers for activities that are not cancelled in advance.
   • Cancellations are made using a Change Request Form found at https://academicdepartments.musc.edu/simulation/forms/coursechange.htm

In-Situ Scheduling Process

I. In-Situ Request (for approved activities. See 3.2 for Initial Development Steps)
   A. Requestor submits the online In-Situ Request form found at https://academicdepartments.musc.edu/simulation/forms/insitu.htm

II. Scheduling
   A. MUSC – HSC will schedule the in-situ activity upon receipt of the In-situ Request Form.
   B. Changes to the In-Situ set-up, etc.
      • After an in-situ activity is approved and scheduled any changes must be requested and documented using a Change Request Form found at https://academicdepartments.musc.edu/simulation/forms/coursechange.htm
   C. Cancellations
      • A cancellation notice is requested at least 24 hours before the scheduled simulation date if possible. Consideration is given for emergencies and other unforeseeable circumstances requiring cancellation. MUSC-HSC reserves the right to charge responsibility centers for activities that are not cancelled in advance.
      • Cancellations are made using a Change Request Form found at https://academicdepartments.musc.edu/simulation/forms/coursechange.htm

Tour Scheduling Process

I. Tour Request
   A. Requestor sends an email to simcenter@musc.edu listing details regarding the tour, including:
      • Contact Information for Tour Coordinator
      • Date and time
      • Description of the participants (eg. High School Students, Visiting Professor)
      • Number of participants
      • Specific area of interest (if any)

II. Scheduling
A. MUSC – HSC will review the information and schedule the tour. If the specific dates and times or other specific requests are not available, MUSC – HSC will contact the Tour Coordinator to discuss options.

B. Cancellations
- A cancellation notice is requested at least 24 hours before the scheduled tour
- The Tour Coordinator should email simcenter@musc.edu to cancel a tour.

3. Research
All research activities involving the MUSC - HSC must have appropriate Internal Review Board (IRB) approval from the investigator’s academic unit, as well as the approval of the MUSC IRB. The MUSC Office of Research will forward all simulation research proposals to the MUSC - HSC Director for screening.

4. Use of Facility, Supplies & Equipment

Clean up
Simulation Support Specialists are responsible for setting up and taking down all center equipment and supplies. Facilitators are responsible for placing all trash in trash cans and removing all personal items and class materials. Materials housed at the center must be returned to the designated container for the Simulation Specialist.

Materials Left in Rooms
Please note, personal items and class materials left in center rooms, including cabinets and drawers, will be removed at the conclusion of the session unless arrangements for temporary or permanent in-room storage have been made with the simulation center staff. Any items removed from rooms will be disposed of unless claimed within a reasonable length of time.

Use of Equipment
Only a designated MUSC SC staff member, trained facilitator, or an authorized participant may operate the MUSC -HSC simulators, audiovisual technology, and all other simulation-related equipment. Facilitators are required to be adequately trained and approved to use MUSC - HSC equipment. Training is arranged using simcenter@musc.edu.

Please do not remove any equipment from any room(s) without explicit permission.

Avoid using ink around the simulators. Ink will permanently mark many of our simulators.

Please do not use any adhesives on manikins without explicit permission.

Do not use make up on any manikin. If you desire moulage, contact us to make arrangements for this to be applied prior to the simulation activity.

Treat manikins with care. Do not do anything to a manikin other than what is designed for and do not attempt to operate simulation equipment unless you have received proper training.
Report any problems with simulators, task trainers, and computer software/hardware immediately to MUSC SC staff. Please, DO NOT make attempts to fix the problem yourself.

An equipment replacement fee may be assessed on damage to equipment due to improper use. This charge will be estimated at the actual list price for parts and labor with a receipt provided to the responsibility center.

**Supplies**

As a general rule, Lead SME or facilitators are responsible for providing all disposable supplies needed for simulation activities. The MUSC – HSC maintains a limited amount of certain supplies. However, use of these supplies must be arranged ahead of time with MUSC- HSC staff.

Limited storage of course supplies is available at the MUSC –HSC. In general, simulation activities will be allowed up to one standard-sized storage bin per course. Storage of supplies must be pre-approved by the MUSC –HSC.

5. **Roles and Responsibilities**

**Pre – Activity**

MUSC – HSC support staff are responsible for:

- Providing facilitator training in pre-briefing, debriefing and running simulations,
- Programming, updating or modifying scenarios as required for the activity.

MUSC - HSC simulation specialists are responsible for:

- Ensuring all applicable supplies, equipment, and rooms are available as requested,
- Testing all simulators and equipment to ensure it is functioning properly,
- Notifying facilitators or lead SME if there are issues encountered for their sessions (i.e., audiovisual or simulator equipment not functioning),
- Notifying the course director of needed supplies.

Lead SMEs are responsible for:

- Reviewing any programmed scenarios,
- Identifying and scheduling needed facilitators,
- Ensuring that facilitators have contacted the MUSC – HSC to receive the required simulation training,
- Ensuring facilitators are qualified SMEs,
- Providing disposable supplies as needed.
- Reviewing the most recent room set up to ensure its accuracy,
- Communicating any changes to the simulation activity using the appropriate form.

**Day of Activity**

MUSC - HSC simulation specialists are responsible for:

- Ensuring complete simulation set-up and that all set up requests have been met,
- Conducting a final assessment of all equipment to ensure its functionality,
- Loading and testing all programmed scenarios,
- Managing the supplies for the activity,
• Supporting the facilitators and participants, including troubleshooting equipment issues and providing “just-in-time” training,

Facilitators are responsible for:
• Ensuring all participants comply with sign in requirements,
• Ensuring that all participants conduct themselves according to the Guidelines for Use of the MUSC – HSC,
• Running programmed scenarios (with support from the Simulation Specialists, as needed).

Post Activity

Facilitators are responsible for:
• Disposing of trash in the appropriate receptacles,
• Removing all course materials and personal items from the rooms, cabinets, and drawers,
• Notifying the Simulation Specialist of any damaged or broken equipment,
• Removing all user-owned supplies or returning them to their pre-assigned storage container.

MUSC - HSC simulation specialists are responsible for:
• Returning all personal items and course materials that are left in the rooms to the facilitator or placing them in lost and found,
• Appropriately covering all manikins remaining in the rooms and ensuring that all beds remaining in the rooms are neatly made,
• Ensuring that all rooms (including control rooms, drawers, cabinets and counters) are neat and clear of all materials and personal items,
• Shutting down all computers, manikins and other equipment,
• Documenting any damaged or broken equipment,
• Returning course “bins” to the storage area.

6. Evaluations

MUSC – HSC provides online post surveys after each simulation activity. Facilitators or Lead SMEs may elect to have the standard survey modified to meet their specific needs. Unless other arrangements are made, results from the surveys will be communicated to stakeholders each quarter. Facilitators are responsible for ensuring that participants complete the post course surveys.

Laptops and kiosks are available for this purpose and may be set up, upon request, for participants to use following their session.

7. Cost Allocation

The MUSC – HSC serves all units within the MUSC enterprise. However, the MUSC – HSC does not receive operational funds directly from MUSC administration. Funds to support the MUSC – HSC come from a cost recovery process, in which responsibility units are billed for using the center. The charges are based on the actual direct and indirect costs of operating the MUSC-HSC with each unit charged the portion of these costs based on their historical use. Questions concerning the cost allocation process should be addressed to the MUSC – HSC Business Manager at simcenter@musc.edu.
Section 6. Safety and Security

1. Facility Security

The MUSC - HSC is located on the first floor of the College of Nursing building on the main campus of MUSC. Physical security is maintained and monitored by the MUSC Public Safety Department (http://academicdepartments.musc.edu/vpfa/publicsafety/). Keys and identification badge access are only granted to authorized personnel. The main entrance is on a time lock, which is typically unlocked at 7:00 AM and locked at 5:00 PM Monday - Friday. The side doors that exit to stairwells are locked at all times and can only be opened from the outside by authorized personnel with key card access.

2. Latex Allergy

The MUSC- HSC is NOT completely latex free. Depending upon their level of contact with manikins* and supplies, there is a risk to them of possible exposure to latex products. All facilitators and participants must acknowledge the risks of environment by signing a consent waiver supplied by administration.

Facilitators are responsible for notifying each participant of this risk when using supplies or equipment containing Latex.

*Laerdal manikins may contain Latex components.

3. Safe Use of Medical equipment, Medications, and Hazardous Materials

   Safe Use of Medical Equipment

   Unless specifically approved by the MUSC – HSC, Medical Equipment will not be shared across the simulation center and patient care areas of MUSC. Medical Equipment housed at the MUSC - HSC will be clearly labeled as belonging to the Simulation Center and for simulation use only.

   Safe Use of Medications

   Under NO circumstances will simulation center users be allowed to bring medications, expired or otherwise from the patient care areas of MUSC. Likewise, users may never take medications marked for simulation use only into patient care areas. MUSC – HSC staff must follow proper procedures for securing expired medications for use in simulated environments. All such medications must be properly labeled for simulation use only.

   Sharps

   All sharps must be disposed of in the containers specifically marked for this purpose.

   Hazardous materials

   All potentially hazardous and hazardous materials, including medications, must be properly disposed of in the containers specifically marked for this purpose. Users should ask a MUSC – HSC staff member if in doubt about the safety of the material or its proper disposal.
Request to Purchase Simulation Equipment

Complete the following information. The simulation equipment requested should be used to:

1. Further the mission of the MUSC HSC and
2. Provide hands-on experience that is not available by other means at a reasonable cost or
3. Positively impact patient care or
4. Improve patient safety.

After an initial review by the MUSC HSC steering committee, you may be asked to explain how your request meets these requirements. Additional consideration is given to equipment used for multiple learning experiences or by large numbers of learners. The MUSC Healthcare Simulation Center (HSC) staff will screen all requests and forward those meeting these criteria to the MUSC HSC Steering Committee for final approval. Requests are then evaluated on benefit vs. cost.

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<th>Equipment Requested (attach brochure, URL, etc. if available)</th>
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<th>Specific Vendor?</th>
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<th>Learners/ activity using equipment (estimate)</th>
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<th>List other potential users of the equipment</th>
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*The MUSC HSC will arrange for requestors to have the opportunity to test equipment from vendors as needed.*