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Rolling Out a State-of-the-Art Simulation Center: Early Experiences



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ROLLING OUT A STATE-OF-THE-ART SIMULATION CENTER: EARLY EXPERIENCES

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PURPOSE

The Simulation Center, opened in the Fall 2006, contains state-of-the-art simulation technology (e.g., high-fidelity adult and pediatric mannequins, task trainers, and real-time/recorded observation and scenario review via audio-visual equipment) that provides an interactive learning environment designed to replicate the clinical setting. It is available to the School of Medicine, Graduate Medical Education, the School of Nursing, and the Graduate School of Biomedical Sciences. Event facilitators (i.e., faculty or residents) were asked to assess their initial perception and utilization of the center.

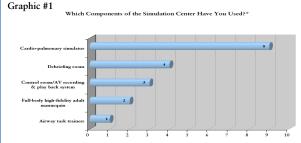
METHODS

A survey containing four closed-ended and three open-ended questions was distributed electronically in February 2007, with one follow-up reminder, to ten faculty ('event facilitators' or 'users') who facilitated sessions in the Simulation Center. Questions included:

- *Which components of the UMMS Simulation Center have you used?
- *Of the components you used, which was the most valuable instructional tool?
- *Which of the following was beneficial to your students' learning during your simulation event(s)?
- Session participants (i.e., student or faculty 'learners') are asked to complete a facility evaluation survey after each simulation event. Among other questions, it asks:
- *We welcome any suggestions on how we might improve upon your experience in the Simulation Center.
- *Please indicate why you would or would not recommend the Simulation Center to your colleagues.

RESULTS

Initial utilization reflects that event facilitators have conducted 27 sessions with a range of 14-23 learners. Nine respondents indicated "physical assessment" (graphic #2) was beneficial to their students' learning; specifically, 90% used the cardio-pulmonary simulator (graphic #1), One user commented that the simulators "are wonderful for presenting case scenarios and promoting decision making skills in students..." and another noted the simulator "in conjunction with debriefing... allows students to demonstrate clinical actions and learn improvements thru review." While 80% felt "direct observation" was beneficial to the students (graphic #2), only 40% used the debriefing room during their session (graphic #1). Additionally, users noted that the center's staff provided "great support." Relevant open-ended responses to the facility evaluation survey highlighting the benefits of the center's components are included in graphic



Graphic #2

Physical Assessment (n=9 'helps to develop critical think as well as multiple possibilitie Dx, Tx, differentials.'

Direct Observation (n=8) simulation because it was ssor's feedback was helpful

Aspects most beneficial to students' learning during simulation events with comments from student participants.

Video capture (n=1)
'This was the first time using the videorecording ... I really enjoye being 1 on 1 w/ the patient w/ou others in the room – made it feel

Procedure Skills Practice (n=4) Excellent tool to gain confidence before doing any procedure in a

CONCLUSION

Event facilitators, all of whom have not had prior experience with simulation technology elsewhere, are finding that the center provides a "very valuable experience" for residents, medical students, and nursing students. Some users noted that additional training on some components would allow them to further utilize the center. Responses to the facility evaluation survey show that learners are interested in using the center more frequently and would like greater access to the center.

FUTURE CONSIDERATIONS

- Offering workshops with a focus on curriculum integration could increase event facilitators' knowledge about incorporating simulation components into their instruction.
- Greater awareness of the center's inventory and training in the use of the components can allow for a wider variety of learning opportunities.
- Expanded access for learners, such as 'open lab' or 'by appointment' session offerings, will provide supplementary hands-on educational experiences.
- Utilization of the center's resources to develop goals and objectives for simulation events may enable faculty/residents to lead more constructive sessions.
- Continued administration of the event facilitator and facility evaluation surveys to gather data about center usage and user satisfaction will provide guidance for the future of the Simulation Center.

