

Simulation 2.0 Integrating Necessary Scientists in Clinical Simulation

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Introduction

- The aim of the shared discovery curriculum at Michigan State University is to prepare the students be the most competent first day residents.
- The purpose of the Simulation is to integrate the clinical science with necessary science (including anatomy, physiology, bioethics etc.).
- The objective of this model is to improve both the clinical skills and the pertaining necessary science behind the simulation.

Need for Innovation

- Michigan State University- College of Human Medicine (MSU-CHM) is in the midst of a major overhaul of the undergraduate medical education curriculum.
- The model of the curriculum is based on shared discovery, just in time learning, early clinical experience through the learning society model.
- The emphasis of the curriculum is to integrate necessary science and clinical science from early first year of medical school.
- To achieve this, we follow "chief complaint and concerns" model whereby the students learn the necessary and clinical science of one chief complaint for every 1-2 weeks.
- *The simulation gives the students a chance to practice those skills. But since these are early first year medical students (week 2 of the medical school), our goal is to integrate the clinical science with necessary science.*



Figure 1: Student Schedule in a typical week

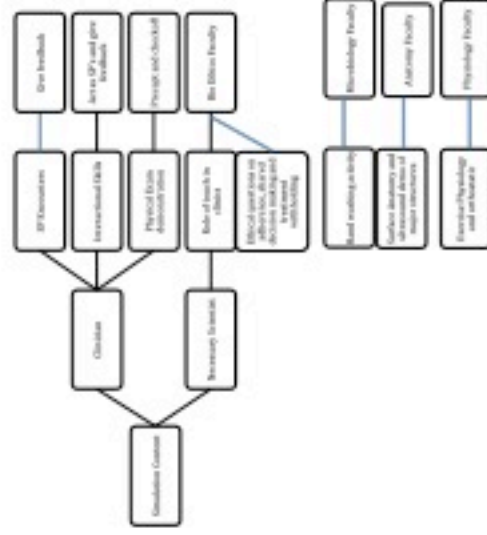


Figure 2: Model for Integration in Simulation

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Discussion

- Simulation is still largely limited to the clinicians teaching skills and knowledge to students.
- There needs to be an emphasis to enhance the medical student understanding of necessary science as it pertains to clinical skills.
- The strength of this type of simulation is that **students learn the necessary science driven by the clinical question or encounter** which will help them retain the importance of the necessary science when seeing patients in real world.
- Our students work as medical assistants twice a week in primary care offices and get to practice these skills in real world supervised by nurse or nurse manager in clinic.
- Student satisfaction has been a very positive factor whenever we have had necessary scientists integrated within clinical skills with relation to anatomy, physiology, bioethics or ultrasound.
- Faculty satisfaction has been very enthusiastic particularly from the necessary scientists as they love the opportunity to teach necessary science correlated to clinical encounters so that students can make the connection.

Conclusion

- We believe the model could be maintained through dedicated teaching hours for the faculty which will help them free the time necessary for such exercises.
- The challenge for such an integration is the time commitment from the lead simulation director and those who are assisting him.
- As long as the institutions see the importance of such a methodology and are willing, the feasibility of such a model could be maintained.