

VIRTUAL SIMULATION IN NURSING, PHARMACY, AND PHYSICAL THERAPY EDUCATION: STAKEHOLDER MEETING

January 31, 2013

Meeting Minutes

Meeting Attendees:

- Jeffery Getchell (Regis)
- Susan Scherer (Regis)
- Janet Houser (Regis)
- Rebecca Moote (Regis)
- Marianne McCollum (Regis)
- Kari Franson (UCD)
- Susan Davis (UCCS)
- Joann Crownover (CSU Pueblo)
- Shawn Anderson (Metro)
- Megan Schumacher (Regis)
- Marcia Gilbert (Regis)
- Hollie Caldwell (Platt College)
- Fara Bowler (UCD)
- Lynn Dierker (HMA)
- Carol Weber (Regis)
- Mike Pascoe (UCD)
- Amanda Jojola (Adams State)
- Allison Bennet (Adams State)
- Sandy Summers (Lamar CC)
- Jody Panian (Colorado Christian)
- Lori Cook (Regis)
- Katie Myers (UCD)
- Flossie O'Leary (Regis)
- Deb Center (CCNE) (on the phone)

THE CASE FOR VIRTUAL SIMULATION

- ❖ Overview of factors creating pressure and opportunity for change in education
- ❖ Context/ Definitions/Examples of platforms and products

Discussion:

Faculty have experience with various types of simulation (second life for public health, games) with varying rates of success. We need to move beyond the use of games for single classes and be able to scale these.

ABOUT THE FEASIBILITY STUDY - ABOUT THE CENTER

- ❖ Study grew out of RHCHP experience with simulation , issues with clinical placements
- ❖ Phase I: Pursue Virtual Sim/Gaming to address clinical crisis
- ❖ Phase II: Address questions about value and design of a center

Discussion

Regulatory agencies including licensure bodies and accreditation present no barriers to the use of simulation for clinical experiences. The nurse practitioner bodies are hesitant to adopt these. If there was a state collaboration, regulatory agency would be more likely to endorse.

AN APPROACH TO INNOVATION: DEVELOPING SIMULATION RESOURCES FOR COLORADO

- ❖ FHCHP framework: considering our goals for Clinical Experience and potential for virtual simulation
- ❖ Premise: Virtual is not the ONLY way to get clinical hours, but a part of clinical experiences.
- ❖ Benefits: unlimited practice, learning for complex decisions, many locations other than sites
- ❖ Steps to Integrate: involve faculty, students, academic programs/clinical partners, regulators/policy makers
- ❖ Study questions: Is there a way to share data? To show cost savings/prove benefits?
- ❖ Priorities: where to start with efforts by a Center

Discussion Session #1

Question #1: Current gaps, the potential of virtual simulation and games to improve clinical competencies

- Current content gaps include early clinical experiences, remediation and make-up hours, with a need for these simulations to address clinical competencies, not tasks. Interprofessional roles can also be addressed.
- Virtual simulation is helpful in standardizing experiences. It is unknown whether virtual simulation can capture the stress seen in clinical environments and whether there is a learning curve related to technology that would interfere with students focusing on the clinical skills.
- The potential benefit is that faculty has control over the clinical simulation, where currently there is no control over the quality of the preceptor. Virtual simulation still allows for clinical oversight.
- Virtual simulations might also be best in earlier clinical experiences.

Question #2: How can virtual simulation/gaming be part of clinical hours and where/how it would related to current clinical rotation?

- As part of clinical hours, virtual simulation would standardize student experience and patients and preceptors. Virtual simulation could capture aspects of clinical such as managing multiple patient and multiple factors.
- This consistency could help standardize clinicals across the state, and allow for restructuring of faculty roles to include more clinical oversight. There is a potential to develop statewide guidelines for use of virtual simulation that would help all programs. Debriefing and faculty oversight remain key components of using virtual simulation as clinical hours.
- It would be beneficial to work with clinical partner organizations to see how this would benefit them as well.

Question #3: Content areas that should be considered as priorities for development

- Some specific content areas included safety procedures, medical/surgical inpatient management, primary care and home health, clinical roles, and diseases across the lifespan. One approach would be to develop content that addresses the standardized test competencies, such as NCLEX.

WORKING COLLABORATIVELY TO PURSUE PRIORITIES FOR GAME-BASED SIMULATION

Question #1: What barriers prevent more effective and expanded use of virtual simulation?

- Faculty barriers include the need for faculty to buy-in, acknowledge development time and implications for workload, and development to understand the effectiveness of simulation.
- Resource barriers include the cost of development, student costs and need for sufficient technology infrastructure to support.
- Educational barriers include limited research on virtual simulation in health care education, student acceptance, and assigning appropriate clinical hours to the simulation.

Question #2: Supports for faculty and students that will be necessary for schools to successfully integrate new teaching and learning approaches as part of program curricula.

- A collaborative center could address implementation and educational issues. The center could assist with training and orientation of faculty and student, provide IT support for faculty and students, both at the statewide level. Educationally, evaluation rubrics and guidelines for using virtual simulation as clinical hours could be developed as a collaborative effort which would help all schools.

Question #3: Technology issues for schools to support expanded computer-based learning.

- The technology requirements to run these games would need to be specified, and not all communities have wireless access. The output (web based vs DVD) would need to be explored. IT support is needed upon implantation and to answer student and faculty questions 24/7. A mechanism to remain updated is needed.

Question #4: Issues for rural versus urban schools.

- A statewide collaborative effort would help rural schools have access to opportunities that are difficult to get now, and would increase consistency in experiences across the state. The technology barriers for rural areas are different than that of urban areas.

Question #5: How would school evaluate costs and measure the return on investment from integrating virtual simulation, including gaming as part of clinical education?

- *There are several levels of evaluation.* Student, faculty, and employer satisfaction evaluations/surveys are one aspect. Student graduation outcomes are another level. Cost comparison including hours virtual simulation requires from faculty versus how many hours it saves from clinical, and the effect on cost and number of clinical instructors needed.

CONSIDERING A COLORADO CENTER FOR VIRTUAL HEALTHCARE EDUCATION

- ❖ Options and considerations need to be discussed about what a Center could look like
 - Phase 2 of the feasibility study is to address development of a center, including whether it a non-profit or corporation, develop a business model, address Intellectual property/legal questions. The technology questions include whether to build or buy products and what technology partners are ready?
- ❖ Initial concept of a Colorado Center - whole state to participate.
 - The mission is to promote collaboration in CO and meet clinical needs as well as develop Virtual Simulations. Regis University would “host” the Center, for sustainability, but the resources virtual, more like a library than a physical space. The center would need to address the relationship of virtual simulation with other physical simulation centers.
 - The group indicated that upper level administrative support is needed at their institutions, so a next step is for Regis to engage administrators (Provost, Dean or President level) at the interested institutions. This center should include faculty at community colleges as well as BSN and graduate programs. Clinical facilities may also be part of the center.

NEXT STEPS

- Meeting minute notes will be provided to attendees and other interested individuals.
- A central mechanism for sharing information will be developed.
- Another meeting and update will occur in April or May of 2013.