

Technology-Supported Simulation: A Capstone Event for Interprofessional Education of Rural Primary Care Providers

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Introduction

- US healthcare
 - Silo model: each provider cares for one disease
- Providers not trained to practice interprofessionally (IP), nor collaboratively
 - Unaware of others' roles and responsibilities
- Multiple chronic conditions patients (MCC)
 - Receive fragmented healthcare
 - Disjointed care affects cost, safety, effectiveness, QOL, & mortality
- Well-integrated IP teams
 - Improve patient physical functioning, well-being, perception of control, selfefficacy, quality of life, satisfaction with service, and reduce healthcare costs
- Team-based approach stresses shared leadership
 - Fosters growth in skills required for healthcare change
- Traditional IP simulations
 - Face-to-face, acute care & critical decision-making

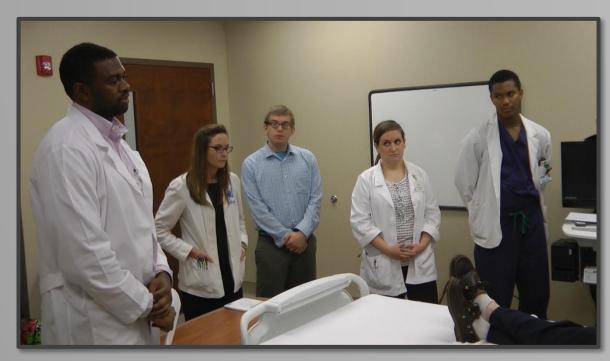
Description

- Semester-based IP course
 - Nursing, medicine, nutrition, social work
- Multiple learning strategies
 - Online didactic material, unfolding case studies, simulated capstone experience
- Format ensured
 - Inclusion of IPEC competencies: communication, values & ethic, roles & responsibilities, teamwork
 - Embedded TeamSTEPPS® skills: leadership, situation monitoring, mutual support, & communication
- Mobile apps for students to telehealth carts
 - Virtual students connected for simulation & debriefing
- Video streamed to remote rooms for debriefing











Critical Steps for Success

- Technology support absolutely essential
 - Access to proper equipment
- Early communication
 - Alignment of schedules
 - Critical evaluation of available equipment
 - Critical thinking predicted potential problems
- Advanced planning & practice
 - Trouble shooting: test calls identifed connection issues, ensured call reliability, & assessed audio/video quality
 - Sessions confirmed importance of advanced planning
- Streamed debriefing session
 - Required built-in teleconferencing system in base-room
 - Multiple cameras and microphones
 - Telehealth cart connected audio/visual system in destination room

Innovation

- Virtual attendance of distance students
- Focus specific to rural veterans with multiple chronic conditions
- Standardized patients from Theater major
- Technology-supported simulation as a capstone learning experience
 - Provided early curriculum IP education
 - Crystalized application of primary care didactic material
- Skill set acquired
 - IPEC and TeamSTEPPS® for primary care









Boyd CM, Fortin M. (2011); Parekh AK, Goodman RA, Gordon C, Koh HK. (2011); Krause CM, Jones CS, Joyce S, Kuhn M, Curtin K, Murphy LP... Lucas DR. (2006); Lapkin S, Levett-Jones T, Gilligan C. (2011)

Initial Findings

- 30 students attended technologysupported simulation, 18 students responded to non-required survey
- Majority (88.9%) reported
 - Positive experience
 - Learning expectations met
- Students reported strategy met course objectives
 - Synthesis of IP collaborative practice concepts (66.7%)
 - Enhanced knowledge of professional roles (66.7%)
 - Better understanding of how IP team improves rural healthcare (66.7%)
- Met IPEC objectives
 - Core competencies (88.9%), collaboration (83.3%), professional roles (72.2%), teamwork (83.3%)

Conclusion

- Silo specific professional education limits breadth of knowledge & development of skills and positive attitudes for collaboration & patientcentered care
- Technology-supported simulation event
 - May help resolve issues related to silo specific approaches to professional education
- Positive findings support continued use of course & technologysupported simulations
- We must
 - Provide face-to-face & virtual students with opportunities to practrice IPEC and TeamSTEPPS® skills in early primary care IP training