



# 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, self-efficacy, 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 identified 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

## Initial Findings

- 30 students attended technology-supported 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 & patient-centered care
- Technology-supported simulation event
  - May help resolve issues related to silo specific approaches to professional education
- Positive findings support continued use of course & technology-supported simulations
- We must
  - Provide face-to-face & virtual students with opportunities to practice IPEC and TeamSTEPPS® skills in early primary care IP training

