Interprofessional Education: Using Standardized Patients and Providers for Primary Care Simulation

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Objective:

To apply innovative clinical simulation with standardized patients and providers to effectively incorporate interprofessional education into primary care-focused academic programs
Background and Significance

Interprofessional Practice and Education:
- Interprofessional Education Collaborative (IPEC)
- Institute of Medicine (IOM)
- Joint Commission

Use of Simulation:
- Benefits and limitations for IPE
- Use in Primary Care v. Acute Care
- Formative v. Summative

Teaching/Learning Theory & Design

- Social cognitive theory – self-efficacy
  - Performance attainment or mastery experience
  - Social modeling or vicarious reinforcement
- Two formative standardized patient simulations in small student groups
  - Herpes Zoster vaccination scenario
  - Anticoagulation therapy for atrial fibrillation case
- Time-in/Time-out & facilitator-prompted learning
- Large Group Debriefing

Student Learning Objectives

- Describe community-based pharmacist’s and nurse practitioner’s roles and responsibilities.
- Communicate timely, sensitive, constructive feedback to a health care team member.
- Discuss benefits and risks of the plan of care interprofessionally.
- Apply critical thinking skills regarding the risks, benefits, and methods for treatments.
Herpes zoster vaccination case

- 61 yo female requesting Shingles vaccine from local pharmacy
- Review of the Herpes Zoster Vaccine
  - Indications for use
  - Analysis of risk vs. benefit
- Roles of Pharmacist & Nurse Practitioner (video conferencing)
  - Scope of practice re: vaccinations
  - Resource in a primary care setting
- Interaction with Physician (phone consultation)
  - Communicate timely, sensitive, constructive feedback

Anticoagulation therapy case

- 82 y.o. male, presents with vague symptoms to a clinic of a Continuing Care Retirement Community.
- Symptom analysis & review of the medications
  - Indications, contraindications, cautions, side effects
- Roles of Pharmacist & Nurse Practitioner (face-to-face)
  - Analysis of risk vs. benefit of anticoagulation treatment
  - Setting: precursor to patient-centered medical home
- Interaction with Physician (speaker phone)
  - Synthesis of assessment & recommended plan of care

Interprofessional Communication Modalities used in Simulation

- Face-to-Face
- Video conference
- Telephone
Teaching/Learning Strategies

• Preparatory readings for all:
  – Clinical content relevant to cases
  – Primary care NP role & scope of practice
  – Community pharmacist role & scope of practice
  – Communication Strategy: SBAR
    Situation, Background, Assessment, Recommendation

Teaching/learning Strategies

• Time-in/time-out debriefings and facilitator-prompted learning:
  – Refining diagnostic reasoning skills
  – Encouraging critical thinking for the plan of care
  – Cueing for communication strategies

Teaching/Learning Strategies

• Large group debriefings
  – All participants in 2 scenarios
  – Reflective feedback
  – Focus: communication issues
  – Predetermined questions
  – Time for open discussion
Qualitative Evaluation

• Focus groups
  – Conducted immediately after simulation on voluntary basis
  – Semi-structured format with predetermined questions
  – 2 independent note-takers for each session
• IRB exemption obtained
  – All participant information de-identified

Qualitative Evaluation

• Generated from focus group transcripts using basic content analysis
• Coding for decreased bias and more accurate observation
  – Bracketing
• Confirmability

Evaluation: Identified Themes

• Clinical role
  – Understanding Roles & Scopes of Practice
  – Increased Confidence
  – Sense of Support
• Educational experience
  – Fidelity
  – Preparation
Evaluation: Clinical Role Themes

• Mutual understanding for respective scopes of practice
  – Addressed misconceptions and highlighted newly found appreciation for each health care professional’s clinical expertise
  – Provided a snapshot of collaborative contribution to betterment of patient care approach
  – “Pharmacists are a priceless resource”
  – “Nurse Practitioners do so much more than I thought”

Evaluation: Clinical Role Themes

• Self-reported increase in confidence
  – Appropriate interprofessional communication for presenting vital clinical information
  – SBAR

• Sense of Support
  – Sense of not being “alone” in practice

Evaluation: Educational Experience

• Fidelity
  – Believable and stayed true to actual practice
  – Simulation allowed for comprehensive observation of practice from different health care professional’s perspectives
  – Vaccination case > Anticoagulation Therapy case
Evaluation: Educational Experience

- **Preparation**
  - Background reading on each practitioner’s role/scope of practice was essential for better understanding of activity
  - Clinical topics on cases expected for the activity was helpful to be able to execute clinical expertise
  - A more comprehensive orientation may be necessary

Limitations of Evaluation

- Anonymity of data
  - Precise understanding of speaker’s perspective
  - Impact of prior experience
- No data collected about preparation
- Some data may not have been collected if stated during debriefings & not repeated
- Lack of quantitative measures

Conclusion

- Must dedicate sufficient time to coordinate and train multiple roles and responsibilities
- Cost / Benefit evaluation of faculty time and resources
- Integration of IPE into the curriculum
  - Overcoming barriers
- Use of IPE in simulation and clinical settings now and in the future
  - Evolving responsibilities of both practitioners
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