



UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

REAL WORLD THINKING | WORLDWIDE REACH

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

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University of Maryland, The Founding Campus
School of Nursing and School of Pharmacy

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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

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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

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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

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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

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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

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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

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Qualitative Evaluation

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

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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”

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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

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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

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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

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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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