Making Interprofessional Simulation Work: Demystifying and Defining the Need for Team Training

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Course Learning Objectives

Upon completion of the workshop the participants will:

• Become familiar with the literature supporting Interprofessional Education (IPE)
• Recognize and identify strategies to overcome barriers to IPE
• Develop a plan to introduce IPE into their simulation program
Interprofessional Education (IPE)

“When two or more professions* learn about, from, and with each other to enable effective collaboration and improve health outcomes”

(WHO, 2010, p.13)

* Professional is an all-encompassing term that includes individuals with the knowledge and/or skills to contribute to the physical, mental and social well-being of a community.

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Challenges for Educators . . .

All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and informatics.

Committee on Health Professions Education Institute of Medicine (2003)
Interprofessional Education Collaborative (IPEC)

• 2010 - developed core competencies for interprofessional education
• 2011 - published report of the expert panel

“In order to deliver high-quality, safe and efficient care, and meet the public’s increasingly complex health care needs, the educational experience must shift from one in which health profession students are educated in silos to one that fosters collaboration, communication and a team approach to providing care.”

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Not enough to

- *Talk* about “interprofessionals working together” as part of class or clinical discussions

- Place interprofessional students in class together to learn pharmacology as an example
WE MUST IMMERSE THEM IN PATIENT CARE EXPERIENCES TOGETHER
SIMULATION ALLOWS US TO IMMERSE OUR LEARNERS
MPEC sponsors:
American Association of Colleges of Nursing
American Association of Colleges of Osteopathic Medicine
American Association of Colleges of Pharmacy
American Dental Education Association
Association of American Medical Colleges
Association of Schools of Public Health
Premises for IPE

• Interprofessional collaborative practice key to safe, high quality, accessible, patient-centered care
• Continuous development of interprofessional competencies by health professions students as part of the learning process
• Requires engaging students of different professions in interactive learning with each other
• Goal is for learner to enter workforce ready to practice effective teamwork and team-based care
Competency Domains for Interprofessional Collaborative Practice

Domain 1: Values/Ethics for Interprofessional Practice

Domain 2: Roles/Responsibilities

Domain 3: Interprofessional Communication

Domain 4: Teams and Teamwork
Collaborative practice in health-care

Collaborative practice* in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, caregivers and communities to deliver the highest quality of care across settings.

* Practice includes both clinical and non-clinical health-related work, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering.

Why interprofessional training?

- Teach in silos
- Expect to practice in teams
- Practice teamwork skills in an acute patient scenario
- Effectively share responsibility for patient care
- Establish working relationships among faculty
Teamwork . . .

- Reduces clinical errors
- Improves patient outcomes
- Improves process outcomes
- Increases patient satisfaction
- Increases staff satisfaction
- Reduces malpractice claims
When power gradients exists among healthcare workers

• Who?
  – Nurse, nursing assistant, nursing student, medical student, intern, family member . . .

• Have the knowledge but not the confidence in reporting what they know

• Important to overcome hesitancy for patient safety

• Include all team members in patient care discussion and decision making

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Interprofessional education . . .

is an opportunity to not only change the way that we think about educating future health workers, but is an opportunity to step back and reconsider the traditional means of healthcare delivery. I think that what we’re talking about is not just a change in educational practices, but a change in the culture of medicine and health-care.

Student Leader

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Barriers to IPE

In your institution, what barriers exist to introducing IPE into simulation?
Barriers to IPE

• Lack of leadership support
• Lack of administrative support
• Difficulties with planning curriculum
• Scheduling
• Proximity of Schools
• Appropriate space and equipment
• Funding
• Coordination and Communication between departments
• Large volume of students
Barriers to IPE

• Breakup into small groups to brainstorm solutions to barriers
• Join the table with the barrier that is the biggest hurdle for you at your institution
IPE in the Pediatric ICU

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Associate Medical Director, PICU
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Pediatric ICU

• 16 bed multidisciplinary unit
• Wide range of medical/surgical patients
• Multidisciplinary care
  – physician
  – nursing
  – respiratory therapy
  – pharmacy
IPE Program

• *In situ* simulation in the PICU

• Monthly ‘Sim Day’
  – staff without clinical responsibilities
  – multiple cases done in a 3 hour block

• Twice monthly ‘Mock Codes’
  – integrated into the regular work day
  – single case in 45 min - 1 hour

• All disciplines included (range of levels)
‘Sim Days’

• **Approach**
  – multiple cases in a single session
  – interdisciplinary leadership team

• **Challenges**
  – ‘extra’ responsibility for staff
  – predominantly new staff
  – creating infrastructure
Mock Codes

• Approach
  – single case
  – interdisciplinary leadership team

• Challenges
  – integration into a very busy unit/day
  – highly variable/unpredictable skill mix
  – creating infrastructure
Pediatric Residency Simulations

• Quarterly sessions, 90 minutes

• Residents at all levels and senior nursing students

• PALS/BLS focused technical skills with various nontechnical skills

• SON Simulation Lab
Residency Simulation Successes

• Importance of nontechnical skills
  » TeamSTEPPS concepts

• Group participation in simulation
  » Fishbowl, Time-Outs, Redos

• Real life suggestions for simulations
New York University School of Medicine
NYU3T: Teaching, Technology, Teamwork

• Purpose
  – Provide NYU medical and nursing students with longitudinal exposure to a diverse patient population and systematic IPE in the competencies of team-based care.
NYU3T Learning Activities

• Longitudinal clinical experience including a curriculum on interdisciplinary, team-based healthcare delivery and interdisciplinary instruction

• Virtual Patients, web-based learning modules, and mannequin-based simulation
IPE Simulation

• A voluntary 1.5 hr session
• 2 Cases:
  – Mrs Emma Cook is admitted for a hip fracture
  – Mrs Lin Trang for COPD exacerbation and dehydration
• Scenarios focus on effective communication and conflict resolution skills presented in web-based modules and based on TeamStepps curriculum
• Roles are new graduate RN and first year medical students
• Nursing students and medical students receive handovers separately
• Form into interprofessional teams
• 15 min encounter + 15 min debriefing
Barriers

• 1) Geography
  – NYU nursing school is 2 miles away from the medical school
  – Buses transport nursing students to the simulation center at medical school

• 2) Inadequate faculty training and development
  – Faculty not familiar with IPE or simulation
  – Faculty development sessions, step-by-step faculty guides
Available resources

• Simulation resources
  
  http://vp21.med.nyu.edu
  
  - Faculty guide
  - Student instruction
Pediatric Clerkship and Residency

• No current program for IPE in simulation
• Under-development:
  – NALS recertification of 2\textsuperscript{nd} year residents involving nursing
  – PICU or ED mock codes involving nursing
Interprofessional Birthing Simulation
Simulation Scenarios

• Preeclampsia and Partial Placental Abruption
  – 25 yo G3P2 at 35 weeks
  – Hypertensive with headache, blurred vision, vaginal bleeding
  – Spontaneous vaginal birth
  – Neonate: pale, flaccid

• Type 1 Diabetes and Shoulder Dystocia
  – 32 yo G3P2 at 38 weeks
  – Hyperglycemic, GBS +, allergic to Amoxycillin
  – Spontaneous vaginal birth with shoulder dystocia
  – Neonate: limp, dusky, no cry
Student Preparation

• Medical Students
  – Enrolled in Pediatric or OB/Gyn Transition Course
  – Complete training in Neonatal Resuscitation Program (NRP)
  – Successfully lead a simulated resuscitation experience and demonstrate procedural skills necessary for the resuscitation

• Nursing Students
  – Enrolled in N479: Maternal/Newborn Nursing
  – Readings in OB nursing textbook and journal articles on neonatal resuscitation guidelines (NRP)

• Pharmacy students
  – Completing senior clinical rotations
  – Review online curriculum for Neonatal Resuscitation Program
TeamSTEPPS

Team Strategies and Tools to Enhance Performance and Patient Safety

• Developed by the Department of Defense’s Patient Safety Program in collaboration with the Agency for Healthcare Research and Quality

• A teamwork system designed for health-care professionals to:
  • Improve patient safety
  • Improve communication and teamwork skills among health care professionals

• All students completed TeamSTEPPS training module prior to simulation experience
Birthing & Resuscitation Simulation

Nursing Students’ Roles
• Assessment & care of laboring woman
• Assessment of fetal status per FHM
• Communication with OB, Peds, & Pharmacy
• Assist with vaginal birth & newborn resuscitation

Pharmacy Students’ Roles
• Recommend medication dosing and administration
• Acquire and administer medications
• Collaborate with medical and nursing students

Medical Students’ Roles
• Respond to call for assistance
• Communication with OB nurse and Pharmacist
• Facilitate vaginal birth
• Direct neonatal resuscitation
• Collaborate with nursing in care of infant and mother
Video
In-situ Mock Code: Inpatient and ED

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In-situ Mock Code – Inpatient and ED

- Inpatient In-situ
  - Residents
  - M3 students
  - Nursing staff
  - Nursing orientees
  - Pharmacy
  - Pharmacy students
  - Hospitalist and PICU Faculty
In-situ Mock Code – Inpatient and ED

• ED In-situ
  – Residents
  – M4 Students
  – Nursing
  – Nursing Orientees
  – RT
  – Pharmacy
  – Pharmacy students
  – ED Faculty
In-situ Mock Code – Inpatient and ED

• My barriers
  – Buy in from nursing administration
  – Availability of participants
  – Scheduling/Coordination
  – Finding space in the hospital
In-situ Mock Code – Inpatient and ED

• Debriefing focuses on communication skills, resource utilization, and team performance
• Nursing sign-up through hospital training system
• Nursing can use as check off for competencies
• On duty nursing, RT and Pharmacy staff participate – back up coverage provided to maintain patient care
Life on the Open Prairie
.... Before Inter-professional Simulation
Just the Usual Road Blocks!

Parallel Activities on Campus without communication between professions

Lack of meaningful relationships between schools/educators

General Skepticism.....

“I’m too busy phenomena”
A completely over-used visual aide!

b2010- Simulation?
What is simulation?
IPE?
Never heard of it!
Educators outside the SOM?
Do they park near me?
Building Early Relationships- “oh you are the best friends I ever had”

Initial Contact- SON/SOM
Shared how simulation was integrated in nursing curriculum.
Invited medicine to participate.
Brainstormed opportunities for collaboration.
Used initial simulation as means to showcase IPE on campus

Hint #1- never turn down a friendly gesture
Thoughts on How to Enter a New World (IPE)
Beginning the IPE Journey

First IPE experience in Pediatrics-Cara Morgan
Pharmacy & RT invited
Grant $ awarded
Second simulation added
Still going strong!

Hint #2- Be polite when visiting another world and try not to make enemies along the way!
Finding the “Wizard” in all of us

Use your success & Share with others..hint/chairs

Take advantage of grant dollars for IPE

Start an IPE SIG

Encourage students to share their views

Hint #3- Pay no attention to the man behind the curtain/steal shamelessly!
Getting *Caught Up* in IPE
FINDING THE TIME FOR IPE

Start small pilot endeavors
Use existing simulations and adjust to your needs
Be a champion to your colleagues
Hint #4-IPE is not a matter of if but when
Getting **Everything** You Ever Wanted with IPE

**Hint Review**
- make friends
- play nice/share
- borrow from others
- share your enthusiasm!
Remember-
Updated Silos in Kansas!