Outside the Boundaries of the Simulation Lab: An Interprofessional Disaster Drill Partnership

Marsha M. King, DNP, MBA, RN, NEA-BC
Dean, Assistant Professor
University of Saint Francis
Crown Point, Indiana
Objectives for Today

• Introduce participants to the benefits of interprofessional collaboration opportunities

• Identify the methodologies involved in planning an Interprofessional Disaster Drill

• Discuss the major factors essential in an interprofessional simulation
Interprofessional Education (IPE)

What is that exactly?

“Interprofessional Education occurs when two or more professions learn with, from and about each to improve collaboration and the quality of care”

Interprofessional Education (IPE) Why Do it?

- Expose students to different perspectives
- Expose students to different ways of thinking based on roles
- Improve communication among disciplines
- Improve teamwork and collaboration
- Improve patient outcomes
The Driving Forces of Pursuing IPE
University of Saint Francis

• Institute of Medicine: Educational Transformation
  -Simulation
  -IPE

• USF Nursing Strategic Plan 2015-2017
  -Foster experiential learning and IPE

• International Nurses Association for Clinical Simulation and Learning Standards (revised 2015 & 2016)
  -Simulation-Enhanced Interprofessional Education
Simulation Program At USF

• Simulation began to be incorporated into curriculum at USF- Crown Point, January 2012
• The International Nursing Association for Clinical Simulation and Learning (INACSL) Standards of Best Practice were utilized as the foundation of the program.
INACSL Standards
International Nurses Association for Clinical Simulation and Learning
December 2016

Standard : Simulation Design
Standard : Professional Integrity
Standard : Outcomes and Objectives
Standard : Facilitation
Standard : Participant Evaluation
Standard : Debriefing
Standard : Simulation Enhanced- IPE
Standard : Simulation Glossary
How do we Incorporate IPE Into our Curriculum?

• How do we start this?
• Do we look to partner with other universities?
• Do we look to other agencies?
• Do we look to other hospitals?
• What types of students could work well with our university?
How do we Incorporate IPE Into our Curriculum?
Initial Purpose

Introduce students to an interprofessional education event (IPE) within the framework of simulation through participating in a Mass Casualty Incident (MCI)
The Beginning of a Partnership
Mass Casualty Incident IPE

• Worked in collaboration with Franciscan Health, Crown Point EMS Academy

• Reworked the established Disaster Drill to meet learning objectives for both sets of students and to meet the INACSL standards that defined our simulation program
Mass Casualty Incident IPE

• Situation
  – Multiple Vehicle Crash on I-65

• Patients
  – 25 total with various traumatic injuries

• Students
  – Placed into 5 teams to include Nursing, Paramedic and EMT students.
Disaster Drill
Multi Vehicle Accident
Mass Casualty Incident IPE

- Utilized local fire and police department relationship with auto salvage yard to obtain vehicles.
- Scheduled at least three months in advance for planning purposes
- Multidisciplinary planning at the table
- Developed detailed timeline for preparation and day of MCI
Mass Casualty Incident IPE

• The University of Saint Francis was converted into an Emergency Department
• This contributed to the opportunity for students to work together outside of the initial scene
• Enhanced teamwork, collaboration, and hand off communication
• Simulated continuum of care
Mass Involvement for Mass Casualty

• Med Surg I (transporters, runners, generalized assistance)
• Med Surg II and EMT students (victims)
• Med Surg III and Paramedic students (providers of care)
• Other students Phlebotomy, Medical Lab Technologists, and Social Work in their own roles
Moulage

• Essential component to provide a realistic aspect to the drill

• A talented make up artist is an asset to any moulage process

• Utilized nursing and EMT students as volunteer victims.
Moulage
Moulage
Briefing and Orientation
Briefing and Orientation

• Discussion of IPE with all students

• Safety Meeting
  • Designation of drill safety officer and IC
  • Students and victims provided with hard hats, ear plugs, and eye protection.
  • Students and evaluators provided distinguishable ANSI vests.

• Students and victims oriented to site, obstacles etc.
Orientation Faculty and Students
Out in the Field

• 1 Team assigned to each vehicle
• 1 Evaluator assigned to each team
• Tasked with working as a team to achieved the following goals
  • Perform primary triage on all patients
  • Treat life threatening injuries
  • Designate and move patients to casualty collection point.
Out in the Field
Field Triage
Field Triage

• Teams must designate casualty collection point
• Tasked with achieving the following goals
  • Move patients to casualty collection point and complete secondary triage.
  • Correctly upgrade or downgrade victims based on change in status.
  • Designate command structure and prepare for transportation to “hospital”
University of Chicago
• Added to the realism of the event

• Simulated evacuation of the most critical patients from the collection point

• Crew provides educational moments concerning approaching the aircraft etc. and also interacted with students post MCI
Involvement of Local Fire Departments and Ambulance Services
Involvement of Local Fire Departments and Ambulance Services

• Fire Departments
  – Provided extrication component to the drill.
  – Utilized also for fire suppression (just in case)

• Ambulance Services
  – On scene for “real world” events
  – Transported victims to the “hospital”
  – Students provided MIC reports enroute
Mass Casualty Incident Post Field Triage
USF Emergency Department
USF Emergency Department

• USF Building utilized as “hospital”
• Rooms set up based on triage color system
• Goals
  – Triage nurse to appropriately assign each patient to the appropriate area.
  – Accurate documentation of patient conditions, treatments etc. (Trauma, Red, Yellow, and Green)
USF Emergency Department
USF Emergency Department
Debriefing
Debriefing findings

• Communication, Communication, Communication!!!!!
• Difference in perspective regarding “triaging” in a MCI situation.
• Strong positive comments from paramedic and nursing students.
• Involve students early in the nursing program
• Can we include other healthcare profession students?
Outcomes

• MCI would be the Annual Fall IPE
• Spring Interprofessional Educational Event
  Active Shooter Drill
Active Shooter Drill
Active Shooter Drill
How we Improved MCI Collaboration
How We Improved MCI Collaboration

• Increased formalized discussion during Briefing regarding communication-IPE
How We Improved MCI

• Designated as a Clinical Day for Med Surg I, II, and III nursing students
• Inclusion of other disciplines (MLT, Phlebotomy, and Social Work)

• Further developed the role of Social Worker (distraught family members)
• Detailed lists for each room regarding equipment and supplies for improved set up
How We Improved MCI

• More detailed planning of victims and the transitioning of changing status
• Implementation of Hybrid Simulation
How We Improved MCI

• Incorporated the High Fidelity Simulation Lab for full arrest clinical scenario
How We Improved MCI

• Incorporated the role of Chaplaincy in a MCI scene with mortalities
How We Improved MCI Collaboration

• Incorporated the Lake County Coroner’s Office
How We Improved MCI

- Incorporated the use of a GoPro camera for a different perspective
Continued Opportunities for Improvement

• Nursing and paramedics students will be taught triage together. Allowing for early professional relationship building and collaboration.
• More detailed scenarios regarding patient and family reactions and interactions
• Created and distributed our first IPE Evaluation Tool
• Further development of faculty roles in the Emergency Department
Let’s Put It All Together

Our 3 minute video filmed by a drone
Oct. 2015
GoPro

Bird’s Eye View

INACSL Board of Director (2011), Standards of Best Practice: Simulation, Clinical Simulation in Nursing, 7 (45) s1-s19. doi:10.1016/j.ecns.2011.05.005


Questions?