

Interprofessional Education in Accelerated Degree Programs



**Brenda Zierler, PhD, RN, FAAN
RWJF NCIN Meeting; October 13, 2012**

Objectives of Presentation

- **Discuss current state of IPE efforts in nursing and health profession education**
- **Describe the importance of IPE to patient safety, quality improvement, patient-centered and team-delivered care**
- **Discuss curricular redesigns and pedagogical approaches to implementing IPE competencies in health professions education**
- **Discuss faculty development needs and provide examples of team-based training**

Current State of IPE Efforts

- **2010**

- IOM Report – *The Future of Nursing: Leading Change, Advancing Health*
- Lancet Commission Report: *Health Professionals for a New Century: Transforming Education to Strengthen Health Systems in an Interdependent World* (Frenk et al., 2010).

- **2011**

- Interprofessional Education Collaborative Expert Panel. *Core competencies for interprofessional collaborative practice: Report of an expert panel.*

- **2012**

- IOM Forum on Innovation in Health Professional Education

Interprofessional Education (IPE) World Health Organization (WHO's)

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

WHO Study Group on IPE and Collaborative Practice (2010)



Interprofessional Education Collaborative Expert Panel (2011)

- Four core competency domains
 - Roles/Responsibilities
 - Interprofessional Communication
 - Teams and Teamwork
 - Values/Ethics for Interprofessional Practice

*Core competencies for interprofessional collaborative practice:
Report of an expert panel. Washington, D.C.: Interprofessional
Education Collaborative. (AACN one of the IPEC Members)*



The Case for IPE

- Evidence from literature – high functioning teams improve outcomes of care
 - 70% of errors related to poor communication within and across teams
- We educate students in silos with no opportunity to learn and practice collaboratively
- Team-based competencies should be a core goal in health professions education



IPE as an Innovative Tool

- Links the education system and the healthcare delivery system to address the “Triple Aim”
 - To achieve better patient care
 - To achieve better public health
 - To achieve a more efficient and affordable healthcare system

Bisognano M, Kenney C. *Pursuing the Triple Aim: Seven Innovators Show the Way to Better Care, Better Health, and Lower Costs*. San Francisco: Jossey-Bass Publishers; 2012.



Dose and Timing of IPE

- Students need education and clinical experience specific to their profession
- Students need to establish their individual professional identity
- Students need opportunities to learn and practice as members of interprofessional teams (matched with the right level of students)
- How much and how often should students train together?



Competency: Interprofessional Communication (Why do we need to communicate effectively?)



Building an IPE Program (non-linear)

- Curriculum mapping across 4 health professional schools (opportunities for shared practice)
- Case development (using real, scrubbed cases)
 - 9 faculty, 19 students, 6 staff members
- Faculty Development
 - Role playing, facilitating, providing feedback, small group discussions
- IPE Shadowing experiences for students
- Review of the literature (85 articles) summarizing IPE interventions (Abu-Rish et al, 2012)



AIMS of UW Macy Grant

- **Develop** a simulation-based, team training program to improve collaboration and communication
- **Evaluate** the impact of a simulation-based team training program on students' communication skills
- **Develop** faculty to teach/facilitate IPE competencies
- **Disseminate** a validated training program to other health sciences schools by creating an exportable “**Interprofessional Training Toolkit**”
- Co-PIs: B. Zierler (nursing) and B. Ross (medicine)



Examples from University of WA

- **Two types of communication experiences/training**
 - ❖ Error disclosure and early apology team training
 - ❖ Acute and chronic simulation scenarios



Error Disclosure & Early Apology Training

Objective: Discuss, plan and disclose an error as a member of an interprofessional team

IPE Competencies: Values/ethics:

Do we advocate for full disclosure?

What the patient doesn't know won't hurt them...



Teaching Interprofessionalism (IP)

- IP as implicit curriculum
 - Select clinical topic that involves multiple professions for the provision of excellent care
 - End-of-life care
 - Hospice
 - Discharge planning
 - Rehabilitation
 - Error disclosure training
 - Case based learning: one approach
 - Topic as vector: alternative approach



Early Apology & Error Disclosure Training

Developed by Sarah Shannon, PhD, RN & Karen McDonough, MD



WHY? Errors have a devastating societal impact

- 7% of hospital patients experience a serious medication error
- 44,000–98,000 annual deaths from medical errors
 - 8th leading cause of death in U.S.
 - **Cost: \$8–29 billion annually**
- More Americans die from medical errors than from breast cancer, AIDS, or car accidents
- 191,000 annual deaths from adverse medical events

Kohn T, et. Al “To Err Is Human” 1999; Health Grades Quality Study 2004



There is a performance gap in how errors are disclosed

- Harmful errors often not disclosed
- When disclosure does take place, often does not meet patient expectations
 - Failed disclosures have substantial impact for patient, healthcare workers, institution
- As we learn more about effective disclosure strategies, need to translate knowledge into practice



Error Disclosure: A team sport!

- Interprofessional education goals:
 - Interprofessional team **discusses error** in a blame-free and honest manner
 - IP teams **plan** for error disclosure
 - IP teams **disclose errors** honestly and compassionately



All Health Professions: Error Disclosure Day Mandatory Training

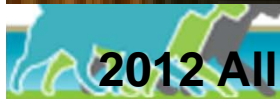
- Half day workshop 2012 (3 hours) –lecture plus small group work with 2 facilitators
 - 210 - Second year medical students
 - 120 - Senior nursing students (ABSN/BSN)
 - 86 - Senior pharmacy students
 - 47 - Physician Assistant students
 - Nearly 90 faculty!!!!

Objective: How to disclose health care errors

Hidden curriculum: How to function as an effective member of a health care team

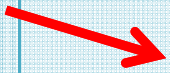




 2012 All Health Professions Error Disclosure Day (~500 students; 90 faculty)

Evaluation: 1-5 scale (strongly disagree to strongly agree)

ITEM	Mean
The general session (didactic) was useful and interesting.	3.66
The small group skills practice was a useful and interesting learning opportunity.	4.50
Learning with other professional students was valuable.	4.69
Thinking about error disclosure from a team perspective was helpful.	4.75
The small group facilitator/s' feedback was helpful.	4.76
I felt I had the opportunity to participate in the small group.	4.72
Overall, the <u>facilitator/s</u> contributed to my overall learning.	4.77



Evaluation: Two open-ended items

1. Please share one thing you learned today that you plan to apply in your future practice

Responses:

104 Positive comments about teamwork

142 Comments about some aspect of content

46 Importance of planning for disclosing an error

35 Importance of admitting error, taking responsibility, apologizing

24 Communication skills with patient

18 Process: acknowledge patient's emotions

15 Process: patient understanding of how error happened

4 Process: need for follow up after initial disclosure



IP: Value of open discussion of errors

Working together with other professionals to understand how to go about very difficult situations. Great practice admitting mistakes that were made!

Team huddle before group error disclosures is very important!

Importance of team discussion prior to error disclosure is imperative. I found this vital to future practice.



IP: Individual responsibility and teamwork (IPE Competencies)

I learned that all health professions feel equally responsible for error.

It was great to see each team member possessing a sense of responsibility. I will continue to carry that throughout my career.

Get support; work as a team.

The importance of team vs. individual accountability.



Using Simulation to Teach or Assess IPE & IPC

- High technology
 - Human patient simulators
 - Task trainer
 - Computers
- Low technology
 - Standardized patients
 - Web-based
 - Faculty/student actors
- High Fidelity (always)





High Technology, high fidelity simulation lab



SD Actor wearing Pardo Pants – mimic post-partum hemorrhage (low tech, high fidelity)



Standardized patient actor w/ Congestive Heart Failure



**Teenager with exacerbation of asthma
(Grandma is standardized actor)**

All Health Professions: Acute Care Simulations (May 2012)

- 306 interprofessional students and (nursing, medicine, pharmacy, PA students); 48 faculty
- Scenarios: 5 distinct cases at 2 medical centers over 4 full days (each student participates/observes 3 cases)
 - Congestive heart failure (standardized actor)
 - Asthma (simulator and standardized actor)
 - Supraventricular tachycardia (simulator and standardized actor)
 - Post-partum hemorrhage (standardized actor/sim baby)
 - Pediatric cases (simulator) severe asthma, seizures, sepsis



Competency: Teams and Team Work

- **Framework– TeamSTEPPS**
- Interprofessional collaboration and communication → effective teamwork:
 - Communication
 - Leadership
 - Mutual support
 - Situational monitoring
 - Team structure



TeamSTEPPS: <http://teamstepps.ahrq.gov/>



4-Hour Simulation Curriculum (annual event)

- Ice breaker and team-building exercises
- Brief overview of TeamSTEPPS/patient safety data
- Break into small groups (3 simulated cases per group – observer/participant)
- Introduction to environment (simulator, actors, supplies/lab results)
- Clinical management
- Run scenario
- Debrief
- Large Group Wrap-up (“How did that go?”)



TeamSTEPPS: Framework for Communication

100 Level

Brief

Call-Out

Check-Back

SBAR

Handoff

200 Level

Huddle

Sharing the
Plan

Cross
Monitoring

STEP

300 Level

Debrief

Advocate & Assert

CUS

Two-Challenge Rule

Feedback

DESC Script

Collaboration









Assessment

Acute Care Scenarios

- **Piloting Assessment & Evaluation tools**
- **Faculty and student observers scored teamwork and communication competencies during training**
- **Student participants scored their team and communication skills**
- **Videos of scenarios (for future video-coding)**
- **Psychometrics of tool (validity/reliability)**
 - **Assessment team (6 faculty and 2 doctoral students)**



Assessment of Acute Scenarios

Overall			Dyspnea Scenario		Tachycardia		Asthma	
This workshop was useful & practical	I learned new skills	I was sufficiently oriented to the manikins and equipment	Appropriate to my level of training	Faculty were excellent	Appropriate to my level of training	Faculty were excellent	Appropriate to my level of training	Faculty were excellent
4.66	4.71	4.52	4.82	4.79	4.54	4.57	4.79	4.82
4.67	4.74	4.68	4.70	4.83	4.65	4.76	4.75	4.79
4.50	4.44	4.33	4.35	4.60	4.35	4.75	4.29	4.69
4.56	4.50	4.44	4.66	4.75	4.56	4.76	4.64	4.75
4.60	4.57	4.49	4.63	4.74	4.53	4.74	4.61	4.76



Developing Faculty

- **“Effective interprofessional teaching is an art form and requires the right aptitudes, attitudes, attention to relevance to the entire group, and free of discipline bias – thus, faculty development will be a key to success”**
- **Student focus group member**



Developing Faculty

- **Lessons learned early on**
 - **Socialization, culture, perspective – learned early in uni-profession education**
 - **Role models for students**
 - **Building capacity of IPE experts**
 - **The future of IPE in nursing is dependent upon faculty (and faculty need to be developed to think and teach differently)**



What are the simple rules for faculty development?

- Integrate efforts into real work in which the faculty member is engaged
- Use active learning
- Spend time building relationships
- Track and use a few meaningful outcomes
- Align incentives
- Celebrate and spread successes; learn from failures



Challenges



Challenges

- **Logistics - infrastructure**
 - Timing of interprofessional experiences
 - Shared space for active learning (simulation lab)
 - Scheduling & academic calendars
 - Scalability , sustainability, costs
- **Faculty**
 - Changing culture
 - Creating IP learning opportunities (teaching in different ways)
 - Mentoring and modeling effective communication
 - Getting clinical educators to publish
- **Students**
 - Understanding team (IPE) competencies
 - Observing faculty (role models)
 - Complexity of cases
 - Demanding “active learning” (driving IPE)

OPPORTUNITIES



Collaborative Practice

- Healthcare System (UW Medicine)
 - TeamSTEPPS Enterprise (6 units at 2 hospitals); 127 staff trained
 - Patient Safety Officers (Master Trainers)
 - One of 5 national TeamSTEPPS centers (focus on simulation)
- VA grant- Primary Care Center of Excellence
 - Residencies for DNP/internal medicine residents (teamlet)
- Community partners – established regional simulation collaborative -78 members representing 35 sites
- Use of TeamSTEPPS in mock code and other simulation training activities (in-situ)
- Train-the Trainer: IPE Faculty Development Institute (2012)



Health Professionals - Students

- **IPE Training**
 - Integrated active team-training simulations into existing courses
 - Mandatory Shadowing experiences 2nd year medical students
 - Active IHI Open School Chapter, Health Equity Circle
 - Service Learning (students won Project Chance - \$20K)
- **IPE Evaluation projects (thesis/dissertation)**
 - Tool development (reliability and validity) 60 hours of video
 - Pre/post assessment knowledge & attitudes – IPE
 - Faculty and peer review (real-time) of communication training



Health Professionals - Faculty

- **Faculty Development**
 - IPE Workshops/consultants
 - 4 faculty members certified as IPE facilitators
 - IPE Teaching Scholars
- **Products**
 - Faculty teaching guides & scenario templates
 - Piloting OB scenario in Mexico & Nairobi (Drs. Dylis Walker & Leslie Carranza)
 - Interprofessional training toolkit (website)



collaborate.uw.edu

- Interprofessional Training Toolkit (Website)

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- ▶ Collaboration between health care professions
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SUMMARY

- **Simulation-based team training to date**
 - ~1000 students & 103 faculty trained
 - **Error disclosure training**
 - >1000 students and 90 faculty trained
- **Faculty Development (academic/clinical)**
- **Validating assessment tools for evaluating IPE**
- **Dissemination of training/products**
- **Future initiatives – IPE Teaching Scholars, UW IPE Faculty Development Institute, Faculty Development: Interprofessional Team-based Care**



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