Resources: People, Places, and Things

Brenda Zierler, PhD, RN, FAAN
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Interprofessional Education Institute

Disclosures

– None

Objectives of Presentation

• Describe resources (people, places, and things) that support and sustain IPE activities based on UW experience

• Provide examples of partnerships and collaborations that support IPE
Building an IPE Program – What does it look like?

- Develop IPE Event (quarterly/annually)?
- Create new IPE Course?
- Integration of IPE competencies within an existing course?
- Shared clinical experience (joint placements)?
- Shared learning experiences – quality improvement or capstone projects?

AIMS of UW Macy Grant - Example

- Develop a simulation-based, team training program to improve collaboration and communication among health professional students
- 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”

UW - Building an IPE Simulation Event

- Reviewed literature (85 articles) summarizing IPE interventions
- 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
**Students – 19 student volunteers (yr1)**

- Match level of students
- Shadowing
- Faculty Develop.
- Student-Centered Learning
- Lit review
- Sim Lab
- Cases
- IPE Event

**Resources – People & Things**

- **Curriculum Mapping by Associate Deans**
  
  **Cognitive Materials – when and where does IPE happen**

<table>
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- **Skills Training**
  
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**Curriculum Mapping as a Tool (Role Clarity)**

- Heightened understanding of each other’s programs
- Identified common threads or themes
- Recognized gaps or unnecessary duplication
- Identified opportunities for shared learning
- Provided insight on optimal times to integrate IPE (communication and QI modules)
- Ensured necessary prerequisites for progression and growing level complexity (spiral) as well as horizontal and vertical integration of our curriculum
## Components of a Curricular Map

- Competencies/Learning Outcomes
- Timing in the Curriculum
- Expected pre- and post-requisite knowledge, skills and attitudes (KSAs)
- Learning Format (lecture, small group, OSCE, SP, simulation)
- Assessment Strategies/Performance Measures
- Clinical Topics

## UW IPE Competencies (revised 2007)

<table>
<thead>
<tr>
<th>Competency</th>
<th>Learning Objective and Performance Measure</th>
<th>Course(s) offered</th>
<th>Learning Format (lab, lecture, seminar, etc.)</th>
<th>Assessment Strategies/Performance Measures</th>
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<tr>
<td>Demonstrates competence in one's own clinical practice discipline</td>
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<td>Requests the use of appropriate clinical and social problems of one's own</td>
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<td>and other disciplines *</td>
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<td>Consults others when outside of her personal or professional expertise</td>
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<td>Collaborates effectively with other health professionals in a variety of</td>
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<td>practice settings **</td>
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## Successes from Curricular Mapping

- Learned more about each other’s programs of study and scope of practice
- Identified and rectified gaps in the curriculum (TeamSTEPPS, Quality Improvement, ACLS training)
- Identified opportunities for shared learning with case studies (face to face and via technology)
- Identified opportunities for shared learning with simulation (face to face)
- Identified common themes where learning could be shared
Examples

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

Planning IPE Event - Resources

Communication – What’s the Problem?
You should be interprofessional!

Provide Context:
JC Sentinel Events - Patient Safety Concerns

Root Causes of Sentinel Events
(All categories: 1995-2005)

- Communication
- Orientation/Training
- Patient assessment
- Staffing
- Availability of staff
- Competency/credentialing
- Medication errors
- Procedure compliance
- Organizational culture
- Care planning
- Risk management
- Leadership
- Continuum of care
- Percent of 1368 events

We need to foster better communication between healthcare professionals as an approach to improving patient safety

Framework for Simulation Training

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

TeamSTEPPS: http://teamstepps.ahrq.gov/
100 – 200 – 300 Level Team Skills
TeamSTEPPS

<table>
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<tr>
<th>100 Level</th>
<th>200 Level</th>
<th>300 Level</th>
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<tr>
<td>Brief</td>
<td>Huddle</td>
<td>Debrief</td>
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<td>Call-Out</td>
<td>Sharing the</td>
<td>Advocate &amp; Assert</td>
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<td>Check-Back</td>
<td>Plan</td>
<td>CUS</td>
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<tr>
<td>SBAR</td>
<td>Cross</td>
<td>Two-Challenge Rule</td>
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<tr>
<td>Handoff</td>
<td>Monitoring</td>
<td>Feedback</td>
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<td></td>
<td>STEP</td>
<td>DESC Script</td>
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<td>Collaboration</td>
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All Health Professions:
Acute Care Simulations (June 2011)

- 305 interprofessional students and (nursing, medicine, pharmacy, PA students); 48 faculty
- Scenarios: 5 distinct cases at 2 medical centers over 4 full days
  - 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

4-Hour Simulation Curriculum (annual event)

- Ice breaker exercise
- 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?”)
- Scaled up from 19 to > 400 students (May 2012)
Using Simulation to Teach IPE
High and low technology
Fidelity should always be high

High Technology, high fidelity simulation lab

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

Acute Care Scenarios

- Piloting Assessment 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)
Lessons Learned

- Stopped training 2 minutes into scenario
- Huddled and asked if everyone was on the same page (shared mental model)?
- Coached students with clinical management
  - 'Expert in the Ear'
- Readjusted scenarios (less complicated)
- Faculty debriefed after each case - adjustments made
- Faculty teaching guides developed/revised

Resources - People

- Clinical Faculty
- Grant Faculty
- Grad students
- SD Actors
- Staff
- Admin
- Practice Partners
- Curricular Committee

Resources - Things

- Curriculum
- Evaluation plan
- IRB
- Technology
- Faculty Guides
- Orientation to Equipment
- Media coverage

IPE Training
Early Apology & Error Disclosure Training

- Developed by Sarah Shannon, PhD, RN & Tom Gallagher, MD

University of Washington, Seattle
All Health Professions: Error Disclosure Day

- Half day workshop (3-hour EVENT) 2012
  - 210 - Second year medical students
  - 120 - Senior nursing students
  - 86 - Senior pharmacy students
  - 47 - Physician Assistant students
  - Nearly 80 faculty!!!!

Objective: How to disclose health care errors

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

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
  - IPE Competencies – communication, role clarity, values/ethics, teamwork
Faculty Development
Error Disclosure & Early Apology

• Just-in-Time Training (1.5-2 hours)
  • Cases for each profession
  • Teaching pearls
  • Debriefing statements

Error Disclosure Training

• 463 students and 76 faculty
• Short didactic lecture on patient safety (context)
• Role play car accident or spilling coffee on friend’s computer (practice apologizing)
• Didactic on IPE and planning error disclosure
• Team disclosures with standardized actors
  • Small groups (43 groups of 12)
Error Disclosure Early Apology

Case:
- 84 yo nursing home patient
- known antibiotic allergy
- given antibiotic in error
- required intubation/ICU

* Used Trained ‘Family Member Actors

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

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

Most Important Concepts Learned – Student Feedback

• Working together as a team to disclose an error
• Not to expect patients to be OK with what happened at the end of the disclosure; that it is a process and not a one-stop fixes all
• That of actually apologizing (and not just being sorry)
• (Tool) Specific stages/steps of disclosure (fairly easy to remember forever)
• Liked the progression of acting out a non-medical apology to a “Harm” error (car accident)
Faculty Development for IPE

Faculty Development – Activities Implemented

• Just-in-time training: acute care simulation & error disclosure
• Master Training: TeamSTEPPS Program
• Case development: using real, scrubbed cases
• Developing new skills: role playing, facilitating, providing feedback, small group discussions
• IPE Pictionary: activity for role clarity
• Consultants: University of British Columbia
• IPE Faculty Teaching Scholar’s Program

Faculty Development - Challenges

• Release time for IPE training
• Release time for IPE teaching
• Assumptions about being IPE competent
• IPE Teaching Scholar’s Program expense: $4,000 and ½ per week protected time x 9 months
• Teaching in new ways: active learning vs PowerPoint
New Initiative – IPE Teaching Scholars

Partnering to Build Capacity
- UW Macy Grant Team + UW Teaching Scholars Program created IPE Teaching Scholars Program
  - Macy funds to support 8 IPE Scholars
  - Leverage existing faculty development resources
  - Require development of IPE Capstone Projects
  - Mainstream IPE content

Faculty Development – Lessons Learned
- Timing of faculty training: Tension to develop faculty prior to training students
- Consider student evaluation of IPE competence:
  - How does my Attending communicate with the charge nurse?
  - Is the Pharmacist an active and valued member of the team?
- Keep the focus on the IP communication: Simplify cases and level the playing field
- Help faculty be knowledgeable: Provide resources such as articles, specific teaching strategies, technology assistance, JIT training, demonstrations
Challenges

- Logistics - infrastructure
  - Timing of interprofessional experiences
  - Shared space for active learning (simulation lab)
  - Scheduling & academic calendars (logistics)
- Faculty
  - Changing culture
  - Creating IP learning opportunities (teaching in different ways)
  - Mentoring and modeling effective communication
- Students
  - Observing faculty (role models)
  - Complexity of cases
  - Demanding “active learning” (driving IPE)

opportunities
Who are Our Partners - UW?

- Healthcare System (UW Medicine)
  - TeamSTEPPS Enterprise (6 units at 2 hospitals); 127 staff trained
  - Patient Safety Officers (Master Trainers)
    - One of 5 national centers
- VA grant - Primary Care Center of Excellence
  - Residencies for NP/internal medicine residents (teamlet)
  - NIH Center of Excellence for Pain Education
- Community partners – established regional simulation collaborative - 78 members representing 35 sites
  - Ambulance donated for rural training

Who are Your Partners (actual, possible or desired)?

- Academic (teaching and research)
  - Students/faculty within and across health profession and other schools
- Practice
  - Clinical, patient safety, quality improvement, Centers
- Community
  - Patients/patients advocates
  - Business (Boeing, etc)

Who are Partners (actual, possible or desired)?

- External Funders
  - Leverage research and training grants
  - Build in faculty development/team training
- Examples:
  - AHRQ grants on patient safety (2)
  - HRSA grant - faculty development use of technology
  - Congressional grant – simulation-based training
  - NIH Center of Excellence in Pain
  - VA Primary Care Center of Excellence (team training)
“Learning With Each Other – student partners”
• Over 50 IPE elective courses
• Certificate Programs (e.g., global health, clinical research methods, emergency preparedness, HIV-STIs, child and maternal health)
• Interprofessional Student Leadership Conference
• TL1 Multidisciplinary Pre-doctoral Research Program
• Annual Interprofessional Events
• Common Book
• Institute of Health Improvement Open School Activities
• Service Learning Groups
• Graduate student projects (developing tools)

collaborate.uw.edu
• Interprofessional Training Toolkit (Website)

Future Plans - UW
• Integrate IPE Competencies into (9) graduate courses over three year period (using active learning experiences)
• Offer 3 IPE events per year (one per quarter)
• Develop technology-enhanced IPE experiences
• Provide shared learning opportunities using joint clinical and project placements (primary care centers, Telepain Clinic, and rural placements)
UW Lessons Learned
• Formulate Center for IPE (central funding)
• Health Sciences Calendar/website/on-line tools
• Provide opportunities for faculty and student engagement outside of the classroom
• Collaborate with community partners
• Identify opportunities for shared learning (technology can be used to supplement face-to-face interactions)

UW Lessons Learned
• Actively involve students in initiatives that advance health & health care delivery
• Study the impact of IPE innovations on interprofessional practice, quality of care, access, cost, and overall satisfaction.
• Build partnerships with other schools (e.g., law, business, bioengineering, public policy)
• Provide forums where best practices and lessons learned can be shared

Summary: People Resources
• Administration
• Faculty
• Students
• Standardized actors
• Practice Partners/preceptors
• Patients/patient advocates
• Educational technologists
• Instructional designers
• Donors
• Community members (e.g. Boeing)
• Consultants
• Media
• Volunteers
Summary: Places

- Board Room
- Classroom
- Simulation lab
- Clinical Setting
- Community
- Virtual
- Global (Chiapas, Mexico; Nairobi, Kenya)

Resources: Things for building

- Literature review (scoping exercise of IPE)
- Curricular mapping
- Rationale for team-training
- Framework/conceptual model for IPE
- Faculty Development
- Authentic cases
- Technology
- Equipment/space
- Fidelity
- Scaling (from 19 to 450 students/event)

Resources – Things for sustaining

- Business case for IPE (patient safety initiatives – rationale for IPE)
- Grant funding
- Committees (relevant to IPE)
- Centers or Institutes
- Professional Organizations
- Meetings/conferences supporting IPE
- Journals
- Media
- Share with other schools
ACKNOWLEDGMENTS

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UW MACY TEAM
*Debra Liner, BA
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Chia-Ju Chiu, PhD student (nursing)
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Thomas Gallagher, MD
Karen McDonough, MD
Lynne Robins, PhD
Doug Brock, PhD
Dana Hammer, PhD
Daniel Low, MD
Katherine Blondon, MD
Ken Plitt, CRNA

Donors
Alums
Student Groups
National TeamSTEPPS Master Training Site
Industry Partners (Boeing, Business School)
Centers: IPE, Pain, Palliative Care, Pt Safety
UW Medicine System (5 medical centers)
IPE Teaching Scholars
IPE Initiative
UW Health Sciences
Regional Simulation Group
Global Health: Training in Mexico and Kenya
Leveraging current and future grants
Professional Organizations
Consultant
Media
Research Partners
Practice Partners