

Bridging Interprofessional Education and Collaborative Practice Through TeamSTEPPS®

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CAB V
 Roanoke, VA
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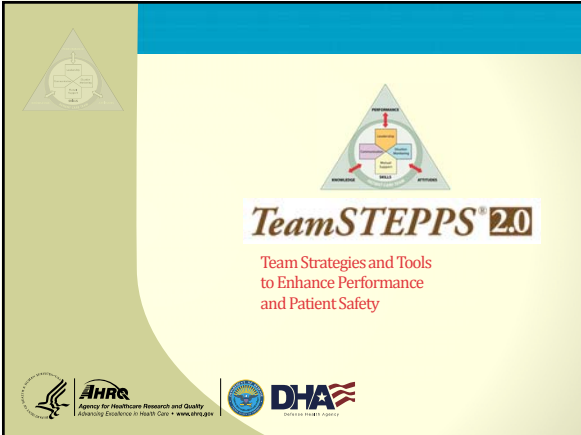
WELCOME!

Learning Objectives

- 1) Outline innovative approaches to bridging the gap between interprofessional education and collaborative practice for professionally diverse student populations in both the classroom and clinical settings.
- 2) Describe how to successfully plan and embed interprofessional TeamSTEPPS® education into curricula.
- 3) Discuss necessary logistical support, program integration, and barriers and opportunities associated with novel approaches to developing interprofessional collaborative practice-ready health care professionals.

Today's Agenda

- 1) TeamSTEPPS® Background and its Value for Bridging the Gap
- 2) The KUMC approach to integrating TeamSTEPPS® & Lessons Learned
- 3) The MUSC approach to integrating TeamSTEPPS® & Lessons Learned
- 4) Facilitated Discussion
- 5) Q & A



TeamSTEPPS® 2.0
 Team Strategies and Tools to Enhance Performance and Patient Safety

AHRQ Agency for Healthcare Research and Quality Advancing Evidence in Health Care • www.aahrq.gov

TeamSTEPPS® 2.0
Introduction

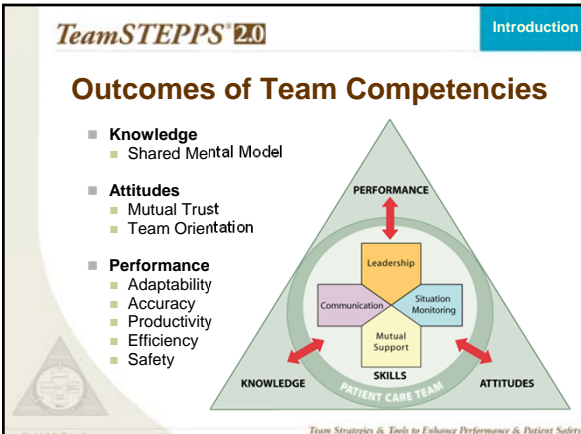
- Developed to improve collaboration and communication
- Communication and teamwork skills essential for transforming patient safety and improving quality of care
- Designed to help healthcare teams to respond quickly and effectively to any situation that arises
- Based on 30 years of research and evidence related to team training
 - Improves attitudes
 - Increases knowledge
 - Improves behavioral skills

Mod 1.2.0 Page 5 Team Strategies & Tools to Enhance Performance & Patient Safety

TeamSTEPPS® 2.0
Introduction

Outcomes of Team Competencies

- **Knowledge**
 - Shared Mental Model
- **Attitudes**
 - Mutual Trust
 - Team Orientation
- **Performance**
 - Adaptability
 - Accuracy
 - Productivity
 - Efficiency
 - Safety

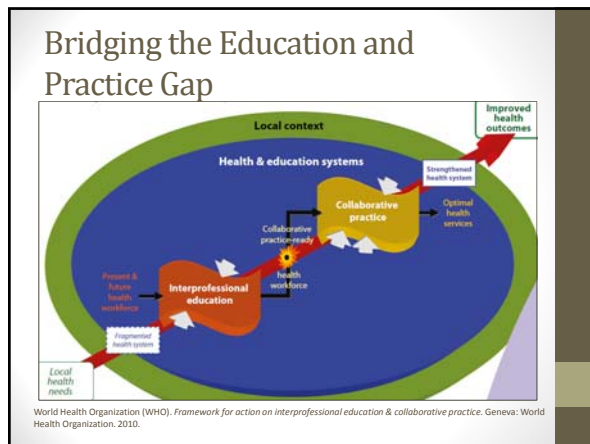


Mod 1.2.0 Page 6 Team Strategies & Tools to Enhance Performance & Patient Safety

TeamSTEPS[®] 2.0 Introduction

Tools & Strategies Summary

<p>BARRIERS</p> <ul style="list-style-type: none"> ■ Inconsistency in Team Membership ■ Lack of Time ■ Lack of Information Sharing ■ Hierarchy ■ Defensiveness ■ Conventional Thinking ■ Complacency ■ Varying Communication Styles ■ Conflict ■ Lack of Coordination and Followup with Coworkers ■ Distractions ■ Fatigue ■ Workload ■ Misinterpretation of Cues ■ Lack of Role Clarity 	<p>TOOLS and STRATEGIES</p> <p>Communication</p> <ul style="list-style-type: none"> • SBAR • Call-Out • Check-Back • Handoff 	<p>OUTCOMES</p> <ul style="list-style-type: none"> ■ Shared Mental Model ■ Adaptability ■ Team Orientation ■ Mutual Trust ■ Team Performance ■ Patient Safety!!
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KUMC
Kansas City, Kansas

4 Schools

- Medicine
- Nursing
- Health Professions
 - 8 academic units
 - 25 programs
- Pharmacy (KU – Lawrence)

Incubator Site

National Center for Interprofessional Practice and Education

KUMC: Center for Interprofessional Education and Simulation

- 1) Classroom Curriculum
- 2) Clinical Curriculum
- 3) Faculty Development
- 4) Research
- 5) Student Extracurriculum

Curriculum Committee Team Members: Delois Laverentz (SON), Jana Zaudke (SOM), Jennifer Jones (SHP), Michael Waxman (SOM), Renee Hodgkins (SHP), Ryan Gove (Student Life), Serra Goodman (Asst.), Dory Sabata (SHP), Wendy Hildenbrand (SHP), Kristy Johnston (Director CIPES), Steve Jernigan (SHP), and Sarah Shrader (Pharm).

Interprofessional Practice and Education at KUMC

- **Foundational Interprofessional Collaboration Program**
 - Salina and Wichita campuses
- Interprofessional Teaching Clinics (Family Medicine and Geriatrics)
- Faculty Development Initiatives
- Geriatrics Champions Program (Team-based Learning)
- Simulations with Standardized Patients (Discharge planning)
- Interprofessional Ethics Seminars
- Interprofessional Collaboration around EHR
- Program-initiated IPE Endeavors
- Training Clinical Teams in KU Hospital

Foundations of Interprofessional Collaboration (FIPC): Introduction to TeamSTEPS[®]

Values and Ethics

Roles and Responsibilities

Interprofessional Communication

Teams and Teamwork

Interprofessional Education Collaborative Expert Panel. (2011). Core competencies for interprofessional collaborative practice: Report of an expert panel. Washington, D.C.: Interprofessional Education Collaborative. Image from <http://teamsteps.ahrq.gov/teamstepslogo.htm>. Accessed 9/2/15.

FIPC: Introduction to TeamSTEPPS®

- Required for all students early in their education at KUMC (first year students targeted)
- Students from 13 professions involved currently:
 - Clinical Lab Science
 - Health Information Management
 - Health Policy and Management
 - Speech Language Pathology
 - Audiology
 - Pharmacy
 - Physical Therapy
 - Occupational Therapy
 - Respiratory Therapy
 - Dietetics and Nutrition
 - Medicine
 - Nursing
 - Nurse Anesthesia

Campus-wide IPE

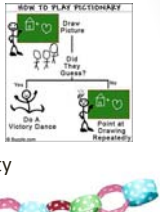
Foundations of Interprofessional Collaboration: Introduction to TeamSTEPPS®

Level 1 Acquire	Values and Ethics	Roles and Responsibilities
	Interprofessional Communication	Teams and Teamwork
Level 2 Apply	Values and Ethics	Roles and Responsibilities
	Interprofessional Communication	Teams and Teamwork

KUMC: FIPC – Level 1

Acquire Activities


- 1) Online Module (pre-work)
- 2) IP Pictionary
 - + Debriefing
- 3) TeamSTEPPS® Paper Chain Activity
 - + Debriefing
- 4) TeamSTEPPS® IP Video Triggers
 - + Debriefing



KUMC: FIPC – Level 2

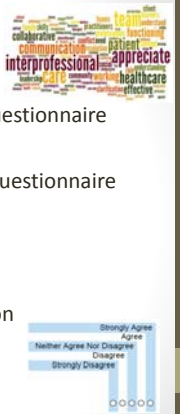
Application Activities

- 1) Case-based IP Plan of Care
 - Profession-specific information
 - + Debriefing
- 2) SBAR and CUS
 - Profession-specific information
 - +Debriefing



FIPC Assessment

- Pre-Event Teamwork Attitudes Questionnaire
- Post-Event Teamwork Attitudes Questionnaire
- Post-Event Evaluation
- Three Weeks Post-Event Evaluation



Progression of FIPC Activities

Cohort	Activity	Year	Month	Level	Students	Faculty Facilitators
1 st Cohort	Level 1 Pilot	Fall 2013	Oct	Level 1	101	28
	Level 2 Pilot	Spring 2014	Feb	Level 2	71	15
	Level 1 Pilot	Spring 2014	Jan	Level 1	163	25
2 nd Cohort	Level 2 Pilot	Fall 2014	Oct	Level 2	78	25
	Level 1 Pilot	Spring 2015	Jan	Level 1	~800	~13
Required for All	Level 2	Fall 2015	Oct	Level 2	~80	~80


Piloting Level 3 Clinical Activities Demonstrate

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS), under grant number 5U49CE001848 from Adaptive, Practice, Quality, and Assessment. Interprofessional Collaborative Practice project. Interprofessional collaborative practice core practice activities (ICCPAs) to guide clinical IPE. This information is intended for educational and training purposes only and does not constitute an endorsement or approval by HRSA, HHS, or the U.S. Government. "March 4, 2015" Interprofessional collaborative practice core practice activities (ICCPAs). Collaborative Practice/Practice in Focus by Health Resources & Services Administration (HRSA) from America's Community College of Health Professions (ACCHEP).


Novel Approach @ KUMC

- Combination of IPEC competency domains and TeamSTEPPS®
- Longitudinal approach – building with each FIPC level
- Practice with specific TeamSTEPPS® tools – ones that are likely to be used in any setting (Brief, Huddle, SBAR, CUS, etc.)
- Very interactive + debriefing after every activity
- Assessing beyond just attitudes, also knowledge, skills and behaviors
- Include professions that provide non-direct patient care
- Dovetails with IPE and IPCP faculty development efforts
- Hospital efforts coincide with academic efforts – will reinforce each other

A Novel Approach



Lessons Learned



- Logistics are a barrier but can be overcome
- Start small (pilot), do it well and then grow
- Involve students in the planning process
- Plan assessment from the very beginning
- Start early in the students' education and thread it through
- Faculty development is important for the student experience
- Tap into the clinical environment, to help bridge the gap
- Break down the "we have been working in interprofessional teams for years" mentality
- Persistence is important for changing culture to a team-based model



MUSC
MEDICAL UNIVERSITY
of SOUTH CAROLINA
Changing What's Possible

New Approaches to Collaborative Learning and Practice: Utilizing TeamSTEPPS®


Introductions

- Holly Wise, PT, PhD & Mary P. Mauldin, EdD (Panelists)
- Kelly Ragucci, PharmD, BCPS, CDE (Co-author but unable to attend)


Other MUSC Team Members:

- Terri Fowler, DNP, APRN, FNP-C
- Zemin Su, MS, MAS
- Jingwen Shang, MS
- Jill Mauldin, MD
- Danielle Scheurer, MD
- Jeffrey Borckardt, PhD
- Donna Kearns, MD
- Nancy D. Duffy, DNP, RN, CEN, CNE

Special Thanks: Sarah Shrader, PharmD, BCPS, CDE



Academic Health Center: 6 Colleges






Office of Interprofessional Initiatives

- Collaborative Practice Activities
- IPE Activities
 - Curricular
 - Required IP course *Transforming Health Care for the Future*
 - Simulation labs
 - Elective courses
 - Extracurricular: IPE Fellowship, Presidential Scholars, IP Day, IP Student-run Pro Bono Clinics, Clarion Competition, Student Interprofessional Society
- Faculty Development (IP Fellowship)
- Research Initiatives




Required IP Course: *Transforming Health Care for the Future*



- **Students include:**
 - Cardiovascular perfusion
 - Dental medicine
 - Health administration
 - Medicine
 - Nursing
 - Occupational therapy
 - Pharmacy
 - Physical therapy
 - Physician assistant
- Currently: Target audience is 1st year (pre-clinical) student


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Required IP Course Content

- TeamSTEPPS® knowledge
- Health care system and ways to improve patient safety
- Cultural competency
- Ethics
- Social determinants of health/health disparities
- Evidence-based decision making

Agency for Healthcare Research and Quality
Advancing Excellence in Health Care



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Transforming Health Care for the Future





- 700+ total students/year (IP sections of ~ 14 students)
 - 18 sections (Fall) & 30 sections (Spring)
- 30+ trained facilitators
- Hybrid course: 4 online modules & 6 face-to-face meetings



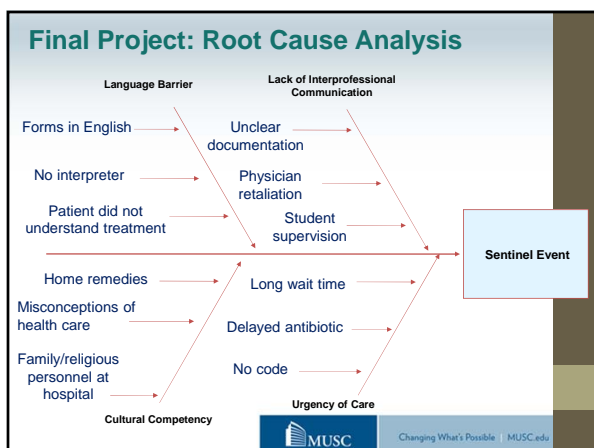
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Organizational Structure: Hybrid

- Online Modules
 - One devoted to TeamSTEPPS®
 - Quizzes & discussion questions
- Face to face meetings w/ facilitator
 - Introduction Session
 - Faculty led discussion of module
 - Three IP student-led discussions including one with TeamSTEPPS® rating of video observation
 - Final Project Presentation






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Simulated Interprofessional Rounding Experience (SIRE)


- Developed 2009 as collaboration between COM and COP and has expanded to include PA and Nursing students
- Students placed in IP clinical teams with up to 5 members:
 - 1 Medical student (Year 4)
 - 1 Nursing student (Upper level)
 - 1 PA student (Year 1)
 - 2 Pharmacy students (Year 3)



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SIRE Curriculum Content:

- Medication interactions
- Medical error detection and disclosure
- Patient-provider communication
- Interprofessional team communication
- Management of an unstable patient



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SIRE Barriers and Strategies



- Barrier: IP Student Schedules
- Strategies: Embedded into courses & Faculty champions
- Barrier: Access to simulation space
- Strategy: Schedule at least 6-12 months advanced planning; increased simulation space
- Barrier: Recruitment & Training of Facilitators
- Strategies: Administrative, Clinical, & Academic Faculty Champions; participation embedded in annual evaluation & promotion criteria; stipends



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SIRE Workshop: 2 hours

- Introduction to TeamSTEPPS®
 - Communication tools
- Team skills training
 - Paper chain exercise (students)

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Simulation Lab Session: 3 Hours



- Two 90 minute sessions using case-based scenario
- Teaching Pair: Observer and Role Player (Patient Voice)

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SIRE Debrief




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SIRE Outcomes: 2011

Survey Items	Overall Pre (n=99)	Overall Post (n=104)	P value
Shared learning will help me communicate better with other HCP after graduation	4 (4 to 5)	5 (4 to 5)	0.02
Learning with other students will improve relationships after graduation	4 (4 to 5)	5 (4 to 5)	0.0003
I am confident in developing a PCT plan for a patient	3 (3 to 4)	4 (3 to 4)	0.29
I am confident in ordering/interpreting lab data	3 (3 to 4)	4 (3 to 4)	<0.001
I am confident in managing med errors	3 (3 to 4)	4 (3 to 4)	0.005
I am confident in managing drug interactions	3 (3 to 4)	4 (3 to 4)	<0.0013

SIRE: Evaluation Spring 2015

- TeamSTEPPS® tool used to:
 - Evaluate team performance
 - Accuracy of clinical recommendations



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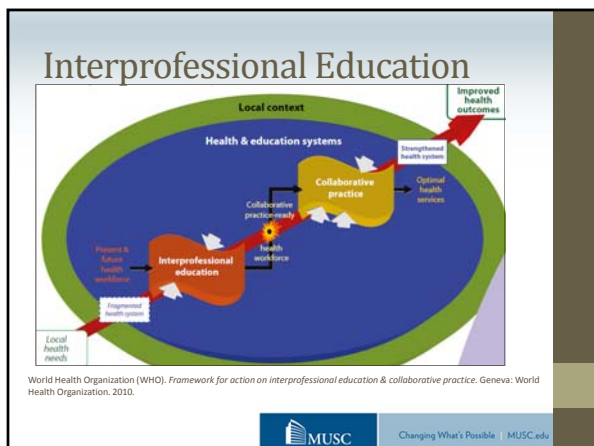
Incubator Site

National Center for



Interprofessional Practice and Education

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Office of Interprofessional Initiatives


- Clinical Partner/Hospital Administration
 - Identified unit in need of improved metrics related to collaborative practice
 - Allocated funds for quality improvement process involving team training
- Academic Faculty/Students
 - Developed IP elective course based on TeamSTEPPS®, trained students in observation skills, conducted 5 hour observations



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Innovation: Teaching TeamSTEPPS® Curriculum

- IP Faculty Facilitators
- Peer-to-peer Teaching
 - Students placed into 5 IP groups
 - Given 1-2 weeks (depending on semester) and information on accessing TeamSTEPPS® training materials and curriculum
 - Creative, multi-media module instruction in 90 minutes!!!
- Utilization of Team Performance Observation Tool (TPOT)
- Experiential Learning: Students participate in QIP as reliable observers in clinical setting




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Innovation: Trained Observers

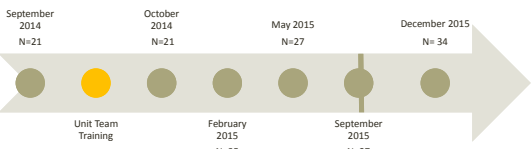
Faculty established range of reliability Students

- Achieved observer reliability with 4 videos of clinical team interactions
- Oriented to floor & completed a 5 hour observation



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Student Observation Timeline




Date	Participant Count (N)	Event
September 2014	N=21	Observation
October 2014	N=21	Observation
February 2015	N=35	Observation
May 2015	N=27	Observation
September 2015	N=27	Observation
December 2015	N=34	Observation

Unit Team Training

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Course Evaluations


100% of the students agree or strongly agree that their teamwork skills improved and that interactions with students from other professions contributed to their learning



None of us are as smart as all of us.
--Ken Blanchard

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Lessons Learned



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Lessons Learned: It takes a village!

Cultivate Champions

- Patient
- Administrative
- Support Services
- Faculty/Clinician
- Student



Next Steps:

- Continued process Improvement
- Ex: Longitudinal IP group learning Preceptor development
- Ongoing faculty development

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Facilitated Discussion



Resources

- TeamSTEPS® Home: <http://teamsteps.ahrq.gov/>
- TeamSTEPS® Tools and Materials: <http://www.ahrq.gov/professionals/education/curriculum-tools/teamsteps/instructor/index.html>
- TeamSTEPS® Training: <http://teamsteps.ahrq.gov/trainingEligibility.htm>
- National Center for Interprofessional Practice and Education: <https://nexusipe.org/>
- NCIPE Resource Exchange: <https://nexusipe.org/informing/resource-center>
- NCIPE Preceptors in the Nexus: <https://nexusipe.org/engaging/learning-system/preceptors-nexus-toolkit>

Thank You!

