OHSU’s Interprofessional Initiative

Jeanette Mladenovic, MD, MBA, MACP
Executive Vice President and Provost
Oregon Health & Science University

• A university whose mission is educating tomorrow’s health and science workforce

• A research-intensive academic health center serving local and regional communities in comprehensive ways

• 5 schools (medicine, dentistry, nursing, pharmacy, public health), 9 major research institutes, 14 professional training programs

• 4,500 students, residents, and postdocs in 43 degree programs, >100 specialty programs

• 3000+ faculty
Our Cultures
50% population
5% spending

45% population
45% spending

5% population
50% spending
OHSU’s Interprofessional Initiative Purpose

• Workforce more aligned for patient and population health

• Cooperative, collaborative, less costly educational programs

• Creation and dissemination of (new) knowledge about IPE/IPCP
Interprofessional Education Collaborative (IPEC)

Identified key barriers to change, including cultural silos, reimbursement issues, discordant schedules, other logistics, and:

*Lack of Role Models*

*Conference Proceedings: Team-Based Competencies: Building a Shared Foundation for Education and Clinical Practice, 2011*
Creating an institutional culture to overcome traditional challenges: the practical

- Institutional Commitment in Strategic Plan
  
  *Educate a clinical and scientific workforce that creates new knowledge and address the health of populations in an interprofessional environment.*

  *Drive interprofessional collaboration and innovation across all missions.*

  *Develop and reward faculty who lead interprofessional education and collaboration within and across missions.*

- Aligned calendars: 14 start, end dates, including orientation

- Created space in lock-step curricula and traditional curricula for university curricula

- Central service for students, space, educational technology

- Centralized support to facilitate interprofessional work: anatomical services, high-fidelity (VirtuOHSU) and low-fidelity simulation, curriculum management, faculty development for interprofessional education.
University Curricula

- Foundations of Patient Safety and Interprofessional Practice (required)
- Foundations of Clinical Anatomy (FOCA) (required)
- Narrative & Healing for Interprofessional Practice (elective)
- Writing and Publishing in the Health Sciences (elective)
- Pain and Pain Management (elective)
- Antibiotics & Public Health (elective)

In the pipeline:

- Conversations in Global Health (required for international experiences)
- Interprofessional Collaborative Practice: community-based participatory research (required rural experience)
- Health Maintenance Throughout the Life-Cycle (required)
- Introductory Biostatistics and Clinical Epidemiology (required and elective)
Creating an institutional culture to overcome traditional challenges: the practical
Mapping for Core Competencies for OHSU graduates

- Steering Committee mapped learning objectives for 8 largest core academic programs at OHSU
- Mapped to the ACGME core competencies/UME learning objectives as longest
- Competencies for each program were qualitatively analyzed and coded using emergent theme analysis
- Used qualitative coding methodology with an iterative process
Opportunities for IP learning across our core academic programs

- Clinical reasoning
- Communication
- Ethics
- Evidence-based practice
- Healthcare systems
- Health information technology
- Life-long learning/self-assessment
- Professionalism
- Public health
- Science foundation
- Procedures
- Data-gathering skills
- Teamwork
# Learning Objectives for IPE Curriculum AY 2013-14

**Safety & Quality Improvement**

At completion of each session, participants will be able to:

<table>
<thead>
<tr>
<th>Thread Champion</th>
<th>COMMUNICATION</th>
<th>INTERPROFESSIONAL TEAMWORK</th>
<th>PROFESSIONALISM &amp; ETHICS</th>
<th>SAFETY &amp; QI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeff Stewart</td>
<td>Describe components of and barriers to effective interprofessional communication.</td>
<td>Articulate team member roles and responsibilities.</td>
<td>Describe the characteristics that distinguish a profession from other careers.</td>
<td>Explain the importance of an ongoing commitment to making patient care safer as part of one’s identity as a health professional and interprofessional team member.</td>
</tr>
<tr>
<td>David Bearden/Judith Baggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Barnard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose effective communication tools and techniques to facilitate discussions and interactions that enhance team function.</td>
</tr>
<tr>
<td>Communicate with team members confidently, clearly, and with respect to ensure a common understanding of information and care decisions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate the ability to give timely, sensitive, instructive feedback to others about one's performance on the team, and respond respectfully as a team member to feedback from others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
**Example of Shared Competency: Patient Safety**

**Nursing**
The effective nurse engages in developing system-level initiatives to improve patient safety and to mitigate error.

**Medicine**
Explain a systems approach to assuring patient safety, including methods to improve safety and reduce medical errors.

*Demonstrate effective attention and communication during transitions of care between members of the health care team.*

**Physician Assistant**
Accept responsibility for promoting a safe environment for patient care and recognizing and correcting systems-based factors that negatively impact patient care.

**Dentistry**
Apply principles of risk management, quality improvement, infection control and radiation safety to patient care.

**Pharmacy**
Ensure that drug products are delivered to patients in a timely, safe and effective manner.

Prepare prescription labeling appropriate for a drug product.

Ensure the security of the drug inventory.

Assess drug orders and prescriptions for potential drug-related problems.

Design a patient care plan to manage poisonings or drug overdoses commonly seen in the practice environment.

Detect and address adverse drug reactions and drug interactions and assess their impact on desired therapeutic outcomes.

Use knowledge of sterile technique to prepare sterile dosage forms or delivery systems.
Culture of Patient Safety acknowledges that “to err is human”; supports speaking up, raising concerns and active listening; ensures transparency by identifying human and system factors contributing to error; and engages in interprofessional teamwork to deliver highly reliable excellent care.

A Just Culture has clear, collective organizational understanding of human error, including a clear line between blameless and blameworthy actions. A just culture recognizes that even competent professionals will make unintentional errors.

IPI Patient Safety Competencies for Health Professions Students
- Describe the differences between unintentional error, at-risk behavior, and reckless behavior.
- Use appropriate interprofessional communication and mutual support techniques to escalate the conversation around safety concerns.
- Identify the relationship between human factors, healthcare system complexity, and patient safety.
- Perform analyses of adverse events and apply strategies to reduce errors.
- Describe the rationale for error reporting and disclosure, apology and support.

Reason’s “Swiss Cheese” Model: Both human & system factors cause errors.

An Error is an act of commission (doing something wrong) or omission (failing to do the right thing) that leads to an undesirable outcome or significant potential for such an outcome.

Four types of behavior can be involved in error: 1. Human error, 2. At-risk behavior, 3. Reckless behavior, and 4. Intentional/Mal-intent. Because each type of behavior has a different cause, a different response is required.

Active Failures encompass all those factors that can influence people and their behavior in the workplace (human factors).

Latent Conditions permit errors to occur and stem from the workplace culture (contributing factors).

Root Cause Analysis (RCA) is a systematic review process to identify factors that contribute to adverse events or near misses. RCA focuses on systems and processes improvement to reduce or eliminate the risk of recurrence.
OHSU Graduation Core Competencies

1. Professional Knowledge and Skills
2. Reasoning and Judgment
3. Evidence-Based Practice and Research
4. Lifelong Learning
5. Communication
6. Professionalism and Ethics
7. Interprofessional Teamwork
8. Safety and Quality Improvement
9. Systems Understanding
10. Patient/Client-Centered Care
Expanding Interprofessional Education and Practice Throughout the State

Source: U.S. Census Bureau Census 2000 Summary File 1 population by census tract.
Students from all programs and schools integrated into community

OHSU’s Interprofessional Campus for Rural Health

Faculty from all missions – education, research, clinical care
Creating New Knowledge for Interprofessional Education and Practice

- Tool to evaluate “teamness” (ACE)
- ICAN to improve health for vulnerable populations
- Communication across electronic health records
IOM Defines “Teamness”

… the construct when clinical teams exhibit the interdependent qualities of high-functioning teams; …teamness consists of core elements that embody successful teams.

IOM report “Core Principles & Values of Effective Team-Based Health Care” Discussion paper from the Best Practices Innovation Collaborative of the Roundtable on Value & Science-Driven Health Care, October 2012
Why develop a tool when there are so many to choose from?

Because they’re not right

- Patient-specific
- Provider-specific
- Lengthy
- Complicated
- Off topic

Brief measure of “teamness”
Process for Tool Development

IOM 5 core elements*
- Shared goals
- Clear roles
- Mutual trust
- Effective communication
- Measureable processes and outcomes

- Interviewed 11 clinical teams nationwide to verify
- High level of agreement with one addition: the element of a supportive organizational environment, or “systems support”
  = 6 core elements
- Conceptual source for first bank of items

*Core principles & values of effective team-based health care, 2012

Thus, using the IOM definitions and the language of the 11 clinical teams on the 6 core elements

original ACE = 30 Likert-type items
## Sample Items

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

- All voices on the team are heard and valued *(mutual trust)*
- Team members have the autonomy to implement their part of the plan once the patient’s needs/goals are clear *(clear roles)*
- The team fosters a culture of continuously improving communication *(effective communication)*
Team mean scores & within group disagreement
Summary of the ACE-15

• Items strongly anchored (IOM report)
• Strong evidence of face (8 experts) and content validity (33 clinicians)
• 15 items measure a single factor of “teamness,” and show high internal consistency and reliability
• Teams with high mean scores and low SDs may be “ideal” for student placement, but moderate scores and high SDs also may be opportunities for student debriefing and for team development
Implications

What is the utility of the ACE-15 → evolving evidence:

– a) for IPE student placement
– b) for IPE student debriefing/reflection
– c) for team development
ICAN to improve health for vulnerable populations
In the six months before I-CAN:
• 48% visited the ED at least once.
• 24% of ED visitors visited three or more times.
• 33% used EMS at least once.
• 33% were hospitalized at least once.

At time of initial assessment:
• 37% of clients lack a primary care home, 23% lack stable housing, and 20% lack health insurance.
• Clients are unable to identify 25-50% of their medications.
• Clients rate their quality of life at just 59 out of 100.
• 60% report problems with mobility, 68% with performing their daily activities, and 80% with pain.

Students have recorded 598 service delivery visits:
• Over 850 hours of service delivery, averaging 85.6 minutes per visit.

After twelve I-CAN service delivery visits*:
• Reduction in ED visits, EMS calls, and hospitalizations (n = 8).
• 63% increase in clients with access to regular primary care (n = 30).
• 53% increase in clients with access to health care insurance (n = 30).
• 39% increase in clients living in stable housing (n = 19).
Creating New Knowledge: Communication Across the Electronic Health Record
Proclivity for Different Professions for Identifying Different Patient Safety Issues
Summary

OHSU’s Interprofessional Initiative

Structured to facilitate cultural change across the university, which includes an AHC

Challenges

Faculty across generations and traditions
Forging a “roadmap” for a new generation of healthcare providers
Competency assessment and program evaluation