

# Interprofessional Education of Health Professionals and One Health

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# ASPPH

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# Menu

- What is IPE? Challenge?
- IPE Drivers?
- Guiding documents?
- What does veterinary medicine bring to the table?
- Where to in the future?



# Transdisciplinary Health

- The complexity of public health and social problems is becoming more challenging. Understanding and designing solutions for these problems requires perspectives from multiple disciplines and fields as well as cross-disciplinary research and practice teams.

Edward F. Lawlor, PhD, Professor & Dean,  
Washington University, St Louis



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# Health in the 21st Century

- Complex, increasing interdependence
  - The *One Health Model*, for example
- Moving from disease to health
- Health is more complicated than disease
- Systems “stove-piped,” fragmented, inadequate
- Training health professionals for the past



# The One Health Hypothesis

- Holistic, systems-based approach to complex, messy problems
- Trans-disciplinarity and team building skills
- Teams need leadership
- Assumptions:
  - Old way not adequate
  - Greater efficacy
  - Greater efficiency
  - Cheaper (or better fund raising model)
- Are we adequately testing ?



Courtesy: Prof. Dominic Travis, UMN College of Veterinary Medicine



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# Health in the 21st Century

- Collaborative, Connective, Creative
  - Interdisciplinary & Trans-disciplinary
  - Inter-professional & Trans-professional
- Cross-sector, Cross-system
- Civic: Local, Regional, National
- Global
- Digital



# Guiding Documents

- WHO Report *Learning Together*, 1988
- WHO Report *Framework*, 2010
- Lancet Commission *Report*, 2010
- Contributions of Veterinary Medicine
- IPEC Expert Panel: *Core Competencies*, 2011



# WHO, 1988



- Findings

It is a policy of the World Health Organization to foster a type of educational programme for health personnel that will enable them to respond to the needs of the populations they serve as part of efforts to achieve the goal of health for all through primary health care.



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# WHO, 2010



Health Professions Networks  
Nursing & Midwifery  
Human Resources for Health

Framework for Action on  
Interprofessional Education  
& Collaborative Practice



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# What is IPE?

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

WHO, 2010



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# What is IPE?

- Interprofessional education is a necessary step in preparing a ***“collaborative practice-ready” health workforce*** that is better prepared to respond to local health needs.

WHO, 2010



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# What is IPE?

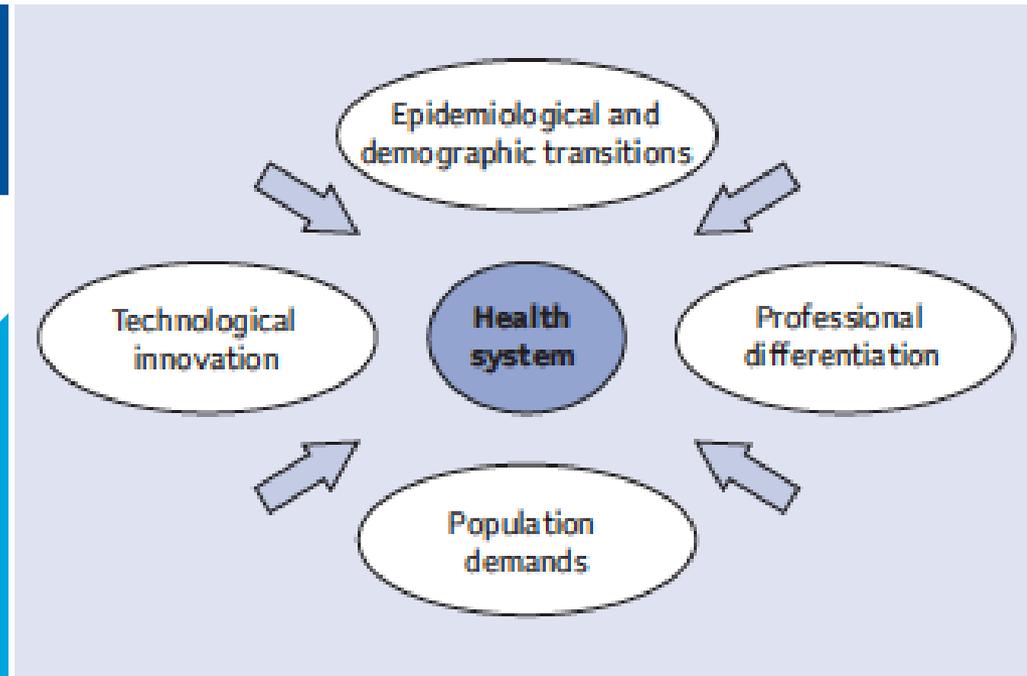
- Collaborative practice happens when multiple health workers from different professional backgrounds ***work together with patients, families, caregivers, and communities to deliver the highest quality of care.***

WHO, 2010



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# Lancet Commission Report, 2010



Emerging challenges to health systems



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# Educating Health Professionals

- 1910: Science-based curriculum
- Mid-20th Century: Problem-based curriculum
- 21st Century: Curriculum that is system-based, with core health professional competencies, global, team-based, mobilize knowledge, critical reasoning



# Educating Health Professionals

## **Instructional reforms**

1. Adopt a competency based curriculum
2. Promote interprofessional and transprofessional education
3. Exploit the power of IT for learning
4. Harness global resources and adapt locally
5. Strengthen educational resources
6. Promote new professionalism
7. Establish joint planning mechanisms

## **Institutional reforms**

8. Expand from academic centers to academic systems
9. Link through networks, alliances, and consortia
10. Nurture a culture of critical inquiry



# Veterinary Medicine's contribution?

- *A few resources...*
  - Hendrix C, McClelland C, Thompson I, Maccabe A, Hendrix C (2005). An interprofessional role for veterinary medicine in human health promotion and disease prevention. ***J of Interprofessional Care*** 19: 1, 3-10.



# Hendrix, et al (2005)

- “...all health care professionals of the 21st century must become prepared to innovate, coordinate, and monitor services for all populations within the healthcare system in which they work and interact with crucial services outside the system. Their patients are not only individuals or families but also entire communities. Veterinarians are currently playing key roles as vital members of this diverse interprofessional health care team...”



# Hendrix, et al, 2005

- Vital Roles
  - Food Safety
  - Environmental Health/Global Medicine
  - Zoonotic Disease
  - Human-Animal Bond



# Veterinary Medicine's contribution?

- *A few resources...*
  - Kinnison T, Lumbis R, Orpet H, Welsch P, Gregory S, Baillie S (2011 Fall). Piloting interprofessional education interventions with veterinary and veterinary nursing students. ***J of Vet Med Educ*** 38:3, 311-8.



# Kinnison, et al (2011)

- London, UK: Royal Veterinary College IPE
  - **“Talking Walls”**
    - Facilitator-led VM and VN role identification, discussion on the veterinary medical team; understanding, respect, reducing misconceptions
  - **Emergency Case Role-Play**
    - Teamwork, communication, canine resuscitation; performance observed, evaluated
  - Student attitudes improved, but did not last



# Veterinary Medicine's contribution?

- *A few resources...*
  - AAVMC Strategic Plan: Action Agenda for Academic Veterinary Medicine, 2013-14



# Veterinary Medicine's contribution?

- AAVMC Strategic Plan - Vision Statement
- *To promote and protect the health and welfare of animals, people and the environment by generating new knowledge and preparing the high-quality veterinary workforce needed to meet continually changing societal demands for veterinary expertise.*





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# IPEC

**Interprofessional Education Collaborative**  
*Connecting health professions for better care*

Founded 2009



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# IPEC, 2011

- Interprofessional Education Collaborative Expert Panel (2011). Core competencies for interprofessional collaborative practice: ***Report of an expert panel. Washington, D.C.: Interprofessional Education Collaborative (IPEC)***



# IPEC Collaborative, 2011



Competency Domain 1:	Values/Ethics for Interprofessional Practice
Competency Domain 2:	Roles/Responsibilities
Competency Domain 3:	Interprofessional Communication
Competency Domain 4:	Teams and Teamwork

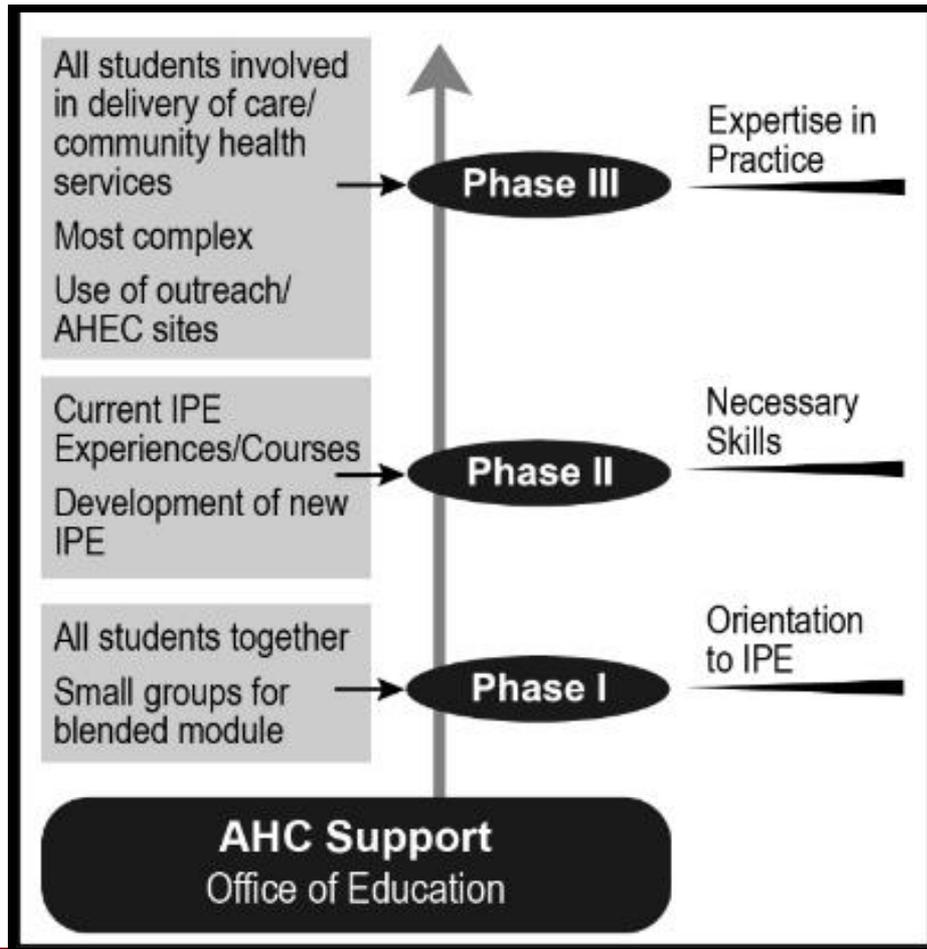
→  
The Learning Continuum pre-licensure through practice trajectory

EXPOSURE: Introduction

IMMERSION: Development

COMPETENCE: Entry-to-Practice

# UMN Approach to IPE



## *Engaging students:*

- Dentistry
- Medicine
- Nursing
- Pharmacy
- Public Health
- Veterinary Medicine

National Center for



Interprofessional  
Practice and  
Education

# UMN Approach to IPE



**Course: Foundations in Interprofessional Communication and Collaboration (online, in-class)**

*Incoming health professions students meet in interprofessional groups with a facilitator*

*The course emphasizes face-to-face interaction and incorporates online resources to explore the concepts of interprofessional education.*

# UMN Approach to IPE



## Building a Toolbox of Skills...

*Middle of academic career...course and activity options build knowledge and develop community wellness concepts...*

Examples include interprofessional experiences such as the CLARION case competition, Immunization Tour, and co-curricular Interprofessional Diabetes Experience course.

# UMN Approach to IPE



**Capstone:** Engagement with community-based partners to support and develop authentic interprofessional clinical experiences.

IPEC competencies cemented in real-world environments via affiliation agreements with health organizations. Teamwork is emphasized in practice environments or interprofessional clinical experiences.

# Public Health Practice Competencies, Capacities

- **Leadership**
  - Collaboration/Team-building/Interprofessional
- **Systems Thinking/Design/Analysis**
  - Strategic Planning/Program Planning/Project Management
- **Communication**
  - Systems, Diversity, Culture, Communities
- **Informatics**
  - Planning, Metrics, Outcomes (aimed at populations)

# Advances and the Future

- IPE has so far emphasized team-work mainly in the clinical arena
- It has been less certain about how health professionals in public health and veterinary health and medicine “fit”
- More education needed role of veterinary and public health professionals



# Advances and the Future

- More innovative thinking on next generation systems that holistically address human and animal health in the context of communities and populations...the world of 2030



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# Hot Health Issues on the Way to 2030

- Impact of Climate Change
- Resource Utilization and Environmental Impact  
(Water, Energy, Land, Air)
- Food Security, Safety, Nutrition
- Urbanization in Africa, India, China, South America
- Education (especially women, girls)
- Aging Planet & Burden of Chronic Disease, including  
Mental Health, Alzheimer's, Dementia
- Infectious Disease, Emerging Zoonotic New ID's
- Global & National Disparities in Health Outcomes
- The Health Work Force



Thank You!

*To your health!*

*Sláinte mhaith!*

אֲשֶׁר וּבְרִיאֻת. - osher uvree'ut

في صحتكم! - fee sahitkum

*A votre sante!*

*Salute! Skål!*



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