

WHAT'S WRONG WITH  
WARREN?

## A Campus-Wide Interprofessional Education Event

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## Objectives

At the conclusion of the presentation, the attendees will be able to:

- List the four Interprofessional Education Collaborative (IPEC) core competencies.
- Recognize the value of interprofessional learning and collaborative practice for improved patient outcomes.
- Discuss how a case study can provide a meaningful interprofessional experience for all healthcare team members involved in patient care.

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## What is Interprofessional Practice?

**Multiple health workers** from different professional backgrounds provide comprehensive health services by working with patients, their families, caregivers and communities to deliver the **highest quality of care across settings.**



Framework for Action on Interprofessional Education & Collaborative Practice  
WHO, 2010

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## Benefits of IP Collaboration

Interprofessional collaboration can decrease:

- total client complications
- length of stay
- tension and conflict in caregivers
- staff turnover
- admissions
- error rates
- mortality rates

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“If health care providers are expected to **work** together and share expertise in a team environment, it makes sense that their **education** and training should prepare them for this type of working arrangement.”

(Romanow, 2002)

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How can they work together  
if they don't learn together?

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## Interprofessional Education



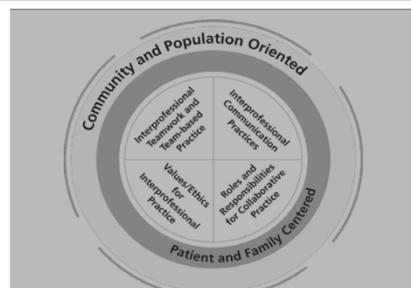
“Occurs when two or more professions learn about, from & with each other to enable effective collaboration & improve health outcomes.”

— WHO Report 2010

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## IPEC Core Competencies

American Interprofessional Education Collaborative Expert Panel, 2011, 2016



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The Learning Continuum pre-licensure through practice trajectory

## Creating What's Wrong with Warren

- Core multidisciplinary team created a case about a fictitious student from a local high school who is a member of the wrestling team
- Incorporates acute care, community/public health response, and convalescent/rehabilitation phases
- Facilitator guides developed for faculty IPE leaders
- Objectives:
  1. Cultivate academic-practice partnerships
  2. Build faculty expertise
  3. Enhance interprofessional learning that prepares learners for collaborative practices

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## The IPE Event

- Dynamic, interactive interprofessional case study
- Purpose: To help students understand each others' roles and responsibilities as members of the health care team
- ~1000 UTMB students (1<sup>st</sup> years)
  - School of Health Professions
  - School of Medicine
  - School of Nursing
  - Graduate School of Biomedical Sciences
  - Institute for Medical Humanities
- Texas Southern University Pharmacy students
- University of Houston Clear Lake Social Work students



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## Disciplines Involved

Acute Phase	Community Phase	Convalescent Phase
Clinical Laboratory Sciences	Preventive Medicine and Community Health	Social Work
School of Medicine	School of Medicine	School of Medicine
School of Nursing Critical Care	School of Nursing Public Health	School of Nursing Case Mgmt & Rehabilitation Nursing
Occupational Therapy		Occupational Therapy
Respiratory Care		Physical Therapy
Nutrition		
Physician Assistant Studies		
Pharmacy		
Institute for Medical Humanities		

Institute for Medical Humanities

## The Warren Case

- Warren Bernard is a 16-year-old right-handed male diagnosed with meningitis and meningococemia due to *Neisseria meningitidis* type B.
- He was hospitalized for a total of 14 days. He initially went into shock, was intubated and ventilated in the ICU. He underwent amputation of his right leg below the knee as well as amputations of thumb, index and pinky fingers on his right hand on day 5 of hospitalization (contrary to his wishes).

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## The Warren Case

- Warren's father remembers receiving a letter three weeks prior to his son's illness stating that a student in the same high school had been diagnosed with meningococcal meningitis.
- Warren lives with his parents and a 14-year-old sister in a two-story duplex house in Galveston.
- Upon release from the hospital, Warren develops phantom limb pain, opiate-induced constipation and mood alterations. His family has only one car and transportation is a challenge.

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## Event Components

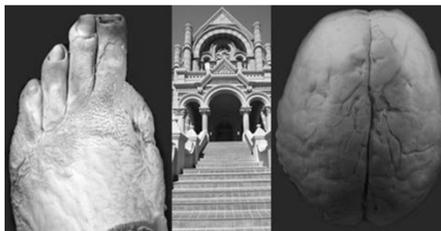
- Small Group Introduction to Case
  - Each discipline (CLS, OT, PAS, etc.) meets with their faculty for introduction to the case
- Consultations
  - Groups of two students seek out consultations from other disciplines
  - Index cards used for consultation questions
  - Sticky notes used for consultant's answers



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## Medical Humanities

Interprofessional consultation with graduate students of the Institute for Medical Humanities at the Old Red/Ashbel Smith building on UTMB campus



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## Event Components

- Small Group Debrief
  - Students return to discipline-specific meeting rooms
  - Discussion of consultations
- Large Group Debrief
  - All students and faculty meet in one setting
  - Two questions from each discipline highlighted for the presentation



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## Small Groups

- Students from each discipline (CLS, OT, PAS, SOM, PT, SON, etc.) meet with their own faculty for an introduction to the case
- Purpose: To review the case in a discipline-specific group and to identify other professions that need to be consulted in the care of the patient
- Time allotted: 60 minutes
- Faculty responsibilities:
  - Review and facilitate discussion of the case
  - Inform students of the disciplines available for consultation
  - Help the students create questions for the consultation

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## CLS Learners

### Warren – Acute Phase

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## Warren in the ICU

Warren is intubated (rapid sequence intubation) and placed on mechanical ventilation.

You receive the following laboratory results from the tests ordered in the Emergency Department:

CBC: WBC =  $23.2 \times 10^3/\mu\text{L}$ , 68% neutrophils, 18% bands, 2% metamyelocytes, 10% lymphocytes, 2% monocytes  
 Hemoglobin: 13.2 g/dL  
 Hematocrit: 40%  
 Platelets: 32,000/ $\mu\text{L}$

BMP: Normal, except bicarb 16, BUN 42, creatinine 1.6

PT/PTT: Prolonged

Liver function tests: Mildly elevated transaminases

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## Warren's Laboratory Results

### Cerebrospinal fluid:

WBC =  $279 \times 10^3/\mu\text{L}$ , 92% neutrophils, 8% lymphocytes  
 (normal =  $<5$ )

Glucose = 32 mg/dL (serum = 87, normal is  $> 2/3$  of serum)

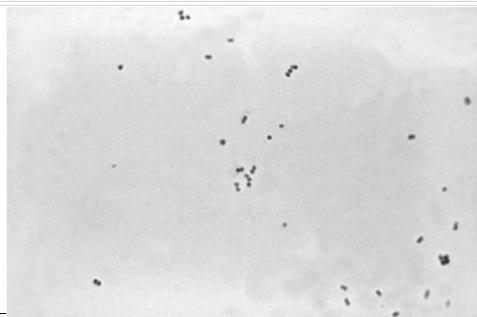
Protein = 125 mg/dL (normal = 15-60)

Gram stain = see next slide

Blood culture, CSF culture, type and crossmatch are pending

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## Warren's CSF Gram Stain



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## Preparing for the Consultation

While some of the students are out seeking consultations, others will remain in the room to answer questions about their discipline in consultation format



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## Consultations

- Students arrive at their chosen specialty and give the index card with the question to the student for the consult
- The student consultant provides a colored sticky note to the student asking the question
- The student in the specialty will answer the question, and the seeker student will write the answer on the colored sticky note
- The consultant student keeps the index card with the question
- The consulting student retains the sticky note

Does the CLS give the vaccine?

The CLS performs a Gram stain that shows a diplococcus.

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## Small Group Debrief

- Reconvene small groups
- Purpose: To discuss the consultation phase in discipline-specific groups and review the questions asked of the students' professions
- Time allotted: 45 minutes
- Students return to their assigned classrooms and place the sticky notes on the Warren paper "patient"
- Students and faculty discuss the questions asked of the consultant group using the collected index cards
- Identify the most commonly asked question(s)
- Text the question/answer to the event coordinator for inclusion in the large group debrief presentation
- Send the Warren paper "patient" to the large group debrief event venue



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## Large Group Debrief

- Purpose: To explain Warren's full care and help students understand the roles and responsibilities of ALL the professions needed for his care in each of the three phases
- Time allotted: 30 minutes
- Colored sticky notes are displayed
- Each discipline has their most commonly asked questions presented to the audience



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## Student Feedback

*"I enjoyed this event because it helped me to understand how all of the healthcare providers work together to impact the care of a patient."*

*"Overall, I enjoyed this experience and feel like I benefitted from it."*

*"I would like UTMB to have an event like this next year."*

*"This activity was a success and I really enjoyed it!"*

*"This concept was great and it was helpful to learn the roles of other healthcare professionals!"*

*"Had a lot of fun!"*

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## Student Feedback

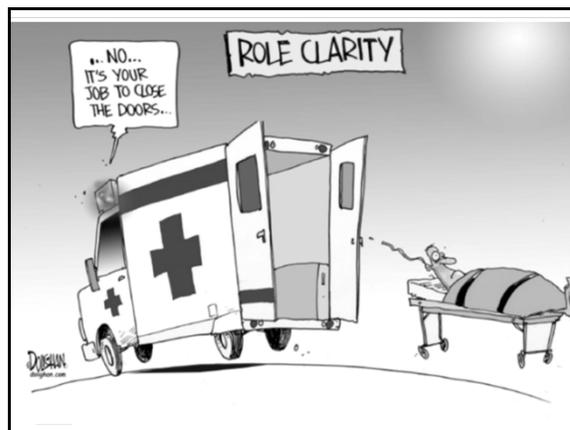
Students who interacted with medical humanities students related an intensified interest in the case:

*"fascinating... human examples make the case come alive a bit more,"* one student attested.

They spoke to a heightened empathy: *"It helped me to visualize what Warren went through,"* one writes.

Specimens moved them to look inward; many mentioned sadness, and one noted: *"There are many diabetics in my family so to see an amputated limb was impactful."*

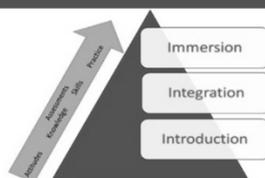
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**IPE<sup>2</sup>**  
PRACTICE

**Building interprofessional teams<sup>2</sup> enhance health**

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