An Interprofessional Approach to Improve Knowledge and Skills for the Treatment of Sepsis

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**Rationale**

- Liaison Committee on Medical Education and Accreditation Council for Pharmacy Education require integration of Interprofessional Education (IPE) into their curricula
- IPE has been shown to break down traditional silos of health care learning and improve health outcomes and patient satisfaction
- The AHRQ identified an increase in sepsis admissions from 2005 to 2014 by 192%
- There is a world-wide focus on improving morbidity and mortality attributed to sepsis as recognized by the World Health Organization Resolution in 2017 recognizing sepsis as a global health priority
- The overall goal was to create comprehensive IPE sepsis modules to improve the learner's knowledge and skills when caring for patients with sepsis.

**Methods**

- Using the Interprofessional Education Collaborative (IPEC) Core Competencies, educational materials were developed consisting of 1) online educational presentations, 2) interactive live case discussions, and 3) high-fidelity patient simulation (Figure 1)
- Included in the initiative were instructors and trainees from the School of Medicine, School of Pharmacy, and School of Nursing
- Primary objectives include: 1) identification of sepsis; 2) identification of goals of care for a patient with sepsis; 3) prioritization of interventions, and 4) working collaboratively within an IPE team
- Students worked together as a team as they progressed though the curriculum
- The educational sessions comprised an 8-hour curriculum delivered over a one-month period
- A pre/post knowledge assessment was developed
- A summative assessment focusing teamwork and communication was utilized (Performance Assessment Communication and Teamwork Tools Set)

**Results**

- Our team of physicians, pharmacists, nurse practitioners (NP), and nurses developed robust interprofessional education (IPE) modules focusing on the management of sepsis
- Engaged multiple members of the health care team in critical care related education
- IPE curriculum improved students’ knowledge of sepsis management and students’ confidence were rated highly

**Conclusion**

- An interdisciplinary curriculum to educate medical, pharmacy, nursing and nurse practitioner students has improved knowledge and skills when evaluating and treating sepsis

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**Summary**

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**Figure 1**

- Knowledge Assessment (Pre-Test)
  - Epidemiology and Identification
  - Empiric, Antibiotics
  - Fluid Resuscitation
  - Vasopressor Therapy
  - Source Control
  - Ultrasound and Volume Responsiveness
  - Passive Leg Raise
  - PK/PD of Antibiotics

- Case Discussion
  - Volume Resuscitation
  - Empiric Antibiotics and Source Control
  - Vasopressors

- IPE Sepsis Simulation
  - Summative Assessment
    - Knowledge Assessment (Post-Test)