Using Small Group Case Based Learning to Practice and Assess Multiple EPAs (2, 3 & 7)

M. Channell DO MA, P. Basehore EdD MPH, A. Gupta DO MS
Rowan University School of Osteopathic Medicine

BACKGROUND

RowanSOM, has recently begun a Curriculum Renewal process. Part of the challenge has been how to create competency-based education with limited resources. Small-group case-based learning lends itself as an efficient way to reinforce other educational components that promote clinical skills. We saw an opportunity to incorporate and address several EPAs at once.

BRIEF DESCRIPTION AND GOALS

We used Small-Group Case-Based Learning to reinforce, through practice, a number of EPAs.

The format and goals were for students to:
1. Become more responsible for researching material in advance of class.
2. Complete Pre-Class Assessments in order to:
   a. Form clinical questions and retrieve evidence to advance patient care (EPA 7).
   b. Reinforce the use of EBM tools to support clinical decision-making
   c. Prioritize a differential diagnosis following a clinical encounter (EPA 2).
3. Recommend and interpret common diagnostic and screening tests (EPA 3) in-class.
4. Critically defend their choices of diagnoses and their request for additional information to make a final diagnosis.
5. Discuss psycho-social components of medicine in a small group setting to address cultural competency and systems based practice.
6. Engage in a longitudinal experience by maintaining small groups with set students and facilitators.

POIN T OF CARE EVIDENCE BASED MEDICINE

Point of Care Evidence Based Medicine (POC EBM) learning is done when student used the appropriate POC resources for a given information need.

Students received:
1. Detailed instruction and demonstrations on various resources/databases
2. Access to RowanSOM Information Mastery website with linked POC databases based on information need
3. Instruction on using Patient/Population, Intervention/Indicator, Comparator/Control, Outcome (PICO) method to formulate an answerable question
4. Practice with information retrieval at each group session assignment

CHANGES AND CASE FORMAT

Changes
1. Decreased the number of facilitators to a set cohort
2. All new cases were written
3. Students are challenged to defend their choices
4. Designated groups of students and facilitators → longitudinal experience.

Case Format
1. Students receive a list of chief complaints (CC) for the semester
2. Prior to each module and the taking of a pre-class assessment, they are instructed to research the differential diagnosis (DDx) for a specific CC and the associated signs and symptoms
3. Pre-class assessment grades are based on their ability to:
   a. Narrow a list of twenty (20) given diagnoses to ten (10) after being given the chief complaint and history of present illness, then
   b. Narrow the list of ten (10) to a list of five (5) after additionally being given the review of systems and medical history.
4. They also receive an in-class assessment grade based on their participation and critical thinking.

CHALLENGES AND ACHIEVEMENTS

Challenges
1. Some students have struggled with the pre-class assessments.
2. Training new faculty in case writing can be intricate. Specifically, ensuring that the cases:
   a. Follow the school format for the H & P set by the Curriculum Committee,
   b. Tie the chief complaint closely to a reasonable differential so OMS II students can properly prepare for the pre-class assessments,
   c. Prioritize a reasonable tiered differential that would allow OMS II students to appropriately prioritize based on the CC, HPI and ROS,
   d. Incorporate assigned psycho-social components

Achievement
a. Students have reported greater comfort in understanding the process of prioritizing a differential diagnosis
b. Faculty have noted progressive skill levels of students in critically defending their recommendations for diagnostic tests and their ranking of diagnoses over the course of the year

REFERENCES

• American Association of Colleges of Osteopathic Medicine (AACOM). Osteopathic considerations for core entrustable professional activities (EPAs) for entering residency. April 2016
• Sackett D, Richardson WS, Rosenburg W, Haynes RB. How to practice evidence based medicine. 2nd ed. Churchill Livingstone; 1997