SLO Assessment: fall 2010

Assessment of program level SLO (Paramedic Program): # 4- Applies knowledge to analysis of specific problems.

EMS 150: Patient Assessment

There were five (5) questions pre-selected from the final written examination for the assessment of this outcome. The questions were scenario-based and required the student to "weed out" distracting information, organize symptom chronology and determine the most probable cause of the presentation. The following is a list of the questions and the percentage of students who responded correctly to each item:

1. You arrive on scene and find an elderly male complaining of severe abdominal and back pain. He states the pain is "all over the left side." On palpation you feel a pulsating mass in the abdomen. This patient is most likely suffering from a/an: **100%** 34 of 34

2. You are called to the home of a 67 year old female who is complaining of severe dyspnea. She states that it started about 45 minutes ago and has been progressively been getting worse. She has a cardiac history but denies chest pain at this time. Her breathing is labored. During your assessment you notice accessory muscle usage and bilateral rales. What is the most likely cause of your patients' condition? **85%** 29 of 34

3. You are called to the home of an 80 year-old male who is having difficulty breathing. The patient is sitting upright in a tripod position and you note profound accessory muscle use. His skin is pale, cool and clammy. Vital sign are: BP 180/82; HR 90, RR 40. His breathing is shallow and labored with a coarse rattling sound during expiration. Auscultation reveals course rales to the nipple line with no air movement in the bases. The family members inform you that the patient was sleeping when the episode began and that this has happened several times since his AMI a year ago. He has mild pedal edema without JVD. Family states onset was about 25-30 minutes ago. Which disease is the patient most likely exhibiting signs and symptoms of? **94%** 32 of 34

4. Your patient is a 23 year old man who complains of abdominal pain. The patient states that the pain began suddenly and was originally located in the area around the umbilicus. Now, it has shifted to the RLQ. The patient complains of nausea and vomiting, and he has a fever of 102 degrees Fahrenheit. On palpation of the abdomen you note rebound tenderness. What condition should you suspect? **67%** 23 of 34

5. Your patient is a 29 year old female complaining of a sudden onset of shortness of breath and chest pain. She indicates she is recovering from surgical repair of her left femur following an automobile accident. What is the patient most likely suffering from? **100%** 34 of 34

Narrative:

The evaluation of these results are consistent with the over all findings of the final examination. Generally, students do well on these types of questions. Responding correctly to these questions is directly related to the premise that students do apply knowledge to analysis of specific problems. The lower number of correct responses displayed on item #4 may suggest that this specific subject area (abdominal emergencies) requires more focus. This evaluation is limited by the lack of input from students with regard to specific questions and an overall perspective on the outcome itself. The next assessment iteration will utilize the same test items to determine whether the suggested actions result in desired outcome.

SLO Assessment: fall 2010

Assessment of program level SLO (Paramedic Program): #4- Applies knowledge to analysis of specific problems

EMS 152: Cardiology

There were five (5) questions pre-selected fro the final written examination for the assessment of this outcome. The questions were scenario-based and required students to "weed out" distracting information, evaluate assessment findings and determine a working diagnosis or appropriate medical intervention. The following is a list of the questions and the percentage of students who responded correctly to each item:

1. Your patient is a 56 year-old male complaining of chest pain. He states that The pain came on while watching television. He denies shortness of breath or N/V. the patient has a history of ASHD and take Diltiazem. His B/P is 160/90, pulse is 110, respirations are 16, skin is normal, normal, warm and lungs are clear bilaterally. He has no other remarkable physical findings. On the cardiac monitor you see a sinus arrhythmia. This patient is probably suffering from: **80%** 29 of 36

2. You respond to a 45 year-old woman who complains of mild to moderate shortness of breath and some chest discomfort. She states she has a long cardiac history and takes digoxin, lasix, and Slo-K. Her B/P is 180/80, pulse is 94 and irregular, respirations are 20, and skin is cool and moist. She has bilateral crackles in the lower lobes. She has no peripheral edema or JVD, the EKG shows atrial fibrillation. Based on this assessment information, the patient is most likely suffering from: **94%** 34 of 36

3. You find an 80 year-old man sitting bolt-upright, in severe respiratory distress, gasping for each breath. During your assessment you discover he has a history of high blood pressure and "breathing problems". His B/P is 170/70, pulse is 110 and regular, respirations are 40 and extremely labored, skin is warm and diaphoretic. Upon assessment of lung sounds you note diffuse crackles and wheezing. The cardiac monitor shows an atrial flutter. You also notice that the patient takes Inderal. Given these findings you suspect you patient I suffering from: **75%** 27 of 36

4. Your 27-year-old EMT partner passes out after stating "I don't feel right". You are aware that she has a cardiac history and takes Cardizem. Your quick assessment reveals a B/P of 70 by palpation, pulse 140, respirations 20 and shallow, skin is pale, cool, and clammy. Her lungs sound mildly congested and her glucose reading is 130mg/dL. The EKG shows a sinus tachycardia. Your partner is likely suffering from: **83%** 30 of 36

5. A 56 year-old male complains of chest “discomfort”. On examination you note he is pale, diaphoretic, with obvious dyspnea. His vital signs are B/P 112/70, pulse 66 strong and regular, respirations reveal tachypnea. He is fully alert and oriented. The patient’s medications are nitroglycerine, which he’s taken prior to your arrival without relief, and propranolol. On the monitor you see a sinus rhythm with a first-degree block and no ST segment elevation. The initial field management of this patient should include:
75% 29 of 36

Narrative:

In reviewing the assessment outcomes there were no major unintended or unexpected results. Possible reason for the lower percentage of correct responses on item #3 is that two different lung sound characteristics were given (crackles and wheezing). Often these characteristics are recognized as individual hallmarks of a specific respiratory ailment. Combining them in this scenario is appropriate and certainly within the realm of an actual patient presentation. In subsequent learning activities more of these multi-layered, multiple complaint scenarios will be utilized. The possibility exist to enhance the understanding of this process by incorporating these finding in scenarios which utilize the high fidelity mannequins in the simulation center.
Item #5 is a multiple/multiple response question which students tend to find more difficult. The question requires the student to first determine which care from a list of items is appropriate and then organize the treatment to select the correct corresponding letter choice. These types of questions are infrequently used during unit exams throughout the course. Increased exposure to this type of question will probably yield better results on this item.
However, a part of the assessment was to draw some conclusion about students’ ability to demonstrate that they do, in fact, apply knowledge to the analysis of specific problems. Given the nature of the course those specific problems are well represented utilizing scenario-based medical case analysis. The next assessment iteration will utilize the same test items to determine whether the suggested actions result in desired outcome.