Course Description

This course introduces the concepts and techniques of patient assessment through inspection, palpation, percussion, and auscultation. The student will demonstrate proficiency in patient physical examination, and taking a complete patient medical history. Principles of barrier protection for blood and body fluid exposures, and isolation precautions will be emphasized. Basic chest x-ray interpretation, basic ECG monitoring, basic laboratory values such as CBC, electrolytes, and basic microbiology are presented as well as Arterial Blood Gas drawing procedure and ABG interpretation. Assessment of critically ill patients is introduced. Each student will be required to successfully complete a Lab competency examination in order to progress to RESP 1121.

Program Outcomes

PO 1: Competence in the cognitive (knowledge) domain
To prepare graduates with demonstrated competence in the cognitive (knowledge) domain of respiratory therapy.

PO 2: Competence in the psychomotor (skills) domain
To prepare graduates with demonstrated competence in the psychomotor (skills) domain of respiratory therapy.

PO 3: Competence in the affective (behavior) domain
To prepare graduates with demonstrated competence in the affective (behavior) domain of respiratory therapy.

Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

Outc. 1: Ability to interpret the acid-base and oxygenation status of the patient
Given the results of an arterial blood gas, students should be able interpret the acid-base and oxygenation status of the patient.

Relevant Associations:

Standard Associations

JRCERT

4 Health and Safety - The program's policies and procedures promote the health, safety, and optimal use of radiation for students, patients, and the general public.

5 Assessment - The program develops and implements a system of planning and evaluation of student learning and program effectiveness outcomes in support of its mission.

General Education Goals Associations

2.1 Students will demonstrate an understanding of data presented graphically or mathematically.

2.2 Students will perform foundational mathematical operations and express and manipulate mathematical information or concepts in verbal, numeric, graphic, or symbolic forms while solving a variety of problems.

5.2 Students will demonstrate the ability to evaluate observations, inferences, or relationships in works under investigation.

9.1 Students will analyze, evaluate, and provide convincing reasons in support of conclusions and arguments.

9.3 Students will demonstrate an ability to evaluate observations, inferences, or relationships in works under investigation.

Related Measures

M 1: Classify ABG results
Test chapter 8 question 41, when given the pH, PaCO2, and the HCO3 of an arterial blood gas, students will be asked to classify the acid-base status of each.

Source of Evidence: Standardized test of subject matter knowledge

Target:
80% of students will correctly identify the acid/base status of the given blood gas 75% of the time.

Finding (2015-2016) - Target: Met
14/15 students correctly identified 80% of the ABG results correctly. In Fact 13/15 correctly identified 100% of the ABG results correctly. One student of the fifteen or 6% of the class did not make the threshold of 80%.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Give students real life ABG results to discuss in class and assignments on interpretation and analysis of blood gas results
Established in Cycle: 2013-2014
I will continue to teach interpretation of ABGs in a systematic format, give students real life ABG results to discuss in class,...

Outc. 2: Demonstrate an arterial blood draw using correct and safe procedure
Demonstrate an arterial blood draw using correct and safe procedure.

Related Measures
M 2: ABG simulation

Students will perform an arterial blood gas correctly, following all safety precautions, on an ABG arm.

Source of Evidence: Performance (recital, exhibit, science project)

Target:
80% of students will correctly perform an arterial blood gas stick on an abg arm, showing competency in procedure and safety measures.

Finding (2015-2016) - Target: Met
100% 15/15 students correctly demonstrated arterial blood gas sticks. All students demonstrated safe procedures.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Continue to use the manikin arm to let students practice the skill of ABG sticks
Established in Cycle: 2013-2014
I will continue to use the manikin arm to let students practice the skill of ABG sticks, including use the new videos purchased ...

Outc. 3: Interpret pulmonary function test results
Interpret pulmonary function test results for restrictive and obstructive disorders.

Relevant Associations:

Standard Associations
CoARC Program Goals
1 To prepare graduates with demonstrated competence in the cognitive (knowledge) domain.

General Education Goals Associations
2.1 Students will demonstrate an understanding of data presented graphically or mathematically.
2.2 Students will perform foundational mathematical operations and express and manipulate mathematical information or concepts in verbal, numeric, graphic, or symbolic forms while solving a variety of problems.
5.2 Students will demonstrate the ability to evaluate observations, inferences, or relationships in works under investigation.
9.1 Students will analyze, evaluate, and provide convincing reasons in support of conclusions and arguments.

Related Measures

M 3: PFT results
Students will look at pulmonary function test results and identify the primary lung defect if any and correctly answer questions concerning obstructive and restrictive results on PFT test. Questions 1,4,5,6,9,10,11 and 16 will be examined from exam on PFTs.

Source of Evidence: Standardized test of subject matter knowledge

Target:
80% of students will identify the lung defect by analyzing the spirometry report.

Finding (2015-2016) - Target: Met
94% 14/15 students correctly identified correctly pulmonary function test result 80% of the time. One student only identified 64% correctly.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Students will be given more actual PFT results to interpret and reinforce PFT skills and interpretation of results
Established in Cycle: 2013-2014
Students will be given more actual PFT results to interpret next year with more quizzes and homework on PFT results. As well, I ...

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Continue to use the manikin arm to let students practice the skill of ABG sticks
I will continue to use the manikin arm to let students practice the skill of ABG sticks, including use the new videos purchased from the NBRC to review this skill set, have students locate the pulses on each other and at home, and both radial and brachial pulses will be palpated.
Established in Cycle: 2013-2014
Implementation Status: Planned
Priority: High

Relationships (Measure | Student Learning Outcome):
Measure: ABG simulation | Student Learning Outcome: Demonstrate an arterial blood draw using correct and safe procedure

Give students real life ABG results to discuss in class and assignments on interpretation and analysis of blood gas results
I will continue to teach interpretation of ABGs in a systematic format, give students real life ABG results to discuss in class, and continue giving quizzes and homework assignments on interpretation and analysis of blood gas results.
Established in Cycle: 2013-2014
Implementation Status: Planned
Priority: High

Relationships (Measure | Student Learning Outcome):
Measure: Classify ABG results | Student Learning Outcome: Ability to interpret the acid-base and oxygenation status of the patient

Students will be given more actual PFT results to interpret and reinforce PFT skills and interpretation of
Students will be given more actual PFT results to interpret next year with more quizzes and homework on PFT results. As well, I will continue having students use our spirometers to do pulmonary function test on each other and then to interpret the results. I shall also use the new videos purchased from the NBRC that cover all objectives of the CRT and RRT test to reinforce PFT skills and interpretation of results.

Established in Cycle: 2013-2014
Implementation Status: Planned
Priority: High

Relationships (Measure | Student Learning Outcome):
Measure: PFT results | Student Learning Outcome: Interpret pulmonary function test results

Analysis Questions and Analysis Answers

What strengths and weaknesses did your assessment results show? In addition, please describe 2 to 3 significant improvements or continuous improvement measures you'll put in place as a result of your assessment findings.

The 2015 class achieved the given objectives. They were strong on basic patient respiratory assessment skills. Skills will be reinforced during clinical practice during the Spring semester. I will continue to use real life ABG and PFT results for discussions during class. I will encourage students to bring in ABG and PFT results to discuss during the Spring semester and to include them in their case studies next semester.