UNIVERSITY OF ARKANSAS
PULASKI TECH

Assessment Report:
2019-2020:
RES 1103 & 1203: RESPIRATORY CARE SCIENCES & NON-CRITICAL CARE (SUMMER EXTENDED TERM)

1. Name of individual compiling report: *DANAH BEARD*

2. Date of submission: *09/18/2020*

3. Is the assessment plan (*Check or highlight one*)

☐ an initial plan for the program ☐ a revision of an old plan ☐ unaltered from previous year

Course-Level Learning Outcomes-

1. What are the Course-Level Outcomes (CLOs)?

VI. Course Content and Outcomes/Objectives

1 Unit I Content: General Patient Care

1. Quality Considerations
2. Safety Considerations
3. Communication
4. Conflict and Conflict Resolution
5. Recordkeeping
6. Interviewing the patient and Tracking a Medical History
7. Physical Examination
8. Causes and Prevention of Sudden death basic Life Support

Unit Outcomes/Objectives

1. Define the meaning of quality in health care services.
2. Understand the basic tools used in quality improvement projects.
3. Describe established methods of quality improvements such as Six Sigma and Lean Management.
4. Understand the importance of monitoring quality to promote better patient outcomes.
5. Identify impediments to care and risk in the direct patient environment.
6. State how communication can affect patient care.
7. Describe the two-patient identifier system.
8. Describe how to improve your communication effectiveness.
9. List the factors associated with the communication process.
10. Describe how to recognize and help resolve interpersonal or organizational sources of conflict.
11. List the common components of a medical record.
12. State the legal and practical obligations involved in recordkeeping
13. Describe how to maintain a problem-oriented medical record.
14. Describe how to apply good body mechanics and posture to move patients.
15. Describe how to ambulate a patient and the potential benefits of ambulation.
16. Write definitions of key terms associated with electricity, including voltage, current, and resistance.
17. Identify the potential physiologic effects that electrical current can have on the body.
18. State how to reduce the risk for electrical shock to patients and yourself.
19. Identify key statistics related to the incidence and origin of hospital fires.

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20. List the conditions needed for fire and how to minimize fire hazards.
21. Describe why patient interviews are necessary and the appropriate interview technique.
22. Identify abnormalities in lung function associated with common pulmonary symptoms.
23. Identify breathing patterns associated with pulmonary disease.
24. Differentiate between dyspnea and breathlessness.
25. Identify terms describing normal and abnormal lung sounds.
26. Describe the mechanisms causing normal and abnormal lung sounds.
27. Review the importance of examining the precordium, abdomen, and extremities to identify abnormalities associated with cardiopulmonary disease.
28. List the causes of sudden cardiac arrest (SCA).
29. List the signs of SCA, heart attack, and foreign body airway obstruction.
30. Describe how to perform cardiopulmonary resuscitation (CPR) on adults, children, and infants.
31. Describe ow to perform defibrillation with automated external defibrillators (AED) and manual defibrillators.
32. Describe how to evaluate the quality and effectiveness of CPR.
33. List the complications that can occur as a result of resuscitation of SCA.
34. State when not to initiate CPR.

2 Unit II Content Medical Gas Therapy/Aerosol & Humidity Therapy

1. Characteristics of Medical Gases
2. Storage of Medical Gases
3. Distribution and Regulation of Medical Gases
4. Oxygen Therapy
5. Hyperbaric Oxygen Therapy
6. Other Medical Gas Therapies
7. Humidity Therapy
8. Bland Aerosol Therapy
9. Selecting the Appropriate Therapy
10. Characteristics of Therapeutic Aerosols
11. Hazards of Aerosol Therapy
12. Aerosol Drug Delivery Systems
13. Assessment-Based Bronchodilator Therapy Protocols
14. Special Considerations

Unit Outcomes/Objectives

1. Describe how medical gases and gas mixtures are produced.
2. Discuss the clinical applications for medical gases and gas mixtures.
3. Distinguish between gaseous and liquid storage methods.
4. Calculate the duration of remaining contents of a compressed oxygen cylinder.
5. Calculate the duration of remaining contents of a liquid oxygen cylinder.
6. Describe how to store, transport, and use compressed gas cylinders properly.
7. Distinguish between gas supply systems.
8. Describe what to do if a bulk oxygen supply system fails.
9. Differentiate among safety systems that apply to various equipment connections.
10. Select the appropriate device to regulate gas pressure or control flow in various clinical settings.
11. Describe how to assemble, check for proper function, and identify malfunctions in gas delivery equipment.
12. Identify and correct common malfunctions of gas delivery equipment.
13. Describe when oxygen (O20 therapy is needed.
14. Asses the need for O2 therapy.

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15. Describe what precautions and complications are associated with O2 therapy.
16. Select an O2 delivery system appropriate for the respiratory care plan.
17. Describe how to administer O2 to adults, children, and infants.
18. Describe how to identify and correct malfunctions of O2 delivery systems.
19. Assess and monitor a patient's response to O2 therapy.
20. Describe when and how to modify or recommend modification of O2 therapy.
21. Describe how to implement protocol-based O2 therapy.
22. Identify the indications, complications, and hazards of hyperbaric O2 therapy.
23. Identify when and how to administer specialty therapeutic gases.
24. Describe how airway heat and moisture exchange normally occurs.
25. State the effect dry gases have on the respiratory tract.
26. State when to humidify and warm inspired gas.
27. Describe how various types of humidifiers work.
28. Describe how to enhance humidifier performance.
29. State how to select and use humidifier heating and feed systems safely.
30. Identify the indications, contraindications, and hazard that pertain to humidification during mechanical ventilation.
31. Describe how to monitor patients receiving humidity therapy.
32. Describe how to identify and resolve common problems with humidification systems.
33. State when to apply bland aerosol therapy.
34. Describe how large-volume aerosol generators work.
35. Identify the delivery systems used for bland aerosol therapy.
36. Describe how to identify and resolve common problems with aerosol delivery systems.
37. Describe how to perform sputum induction.
38. State how to select the appropriate therapy to condition a patient's inspired gas.
39. Define the term aerosol.
40. Describe how particle size, motion, and airway characteristics affect aerosol deposition.
41. Describe how aerosols are generated.
42. List the hazards associated with aerosol drug therapy.
43. Describe how to select the best aerosol dry delivery system for a patient.
44. Describe how to initiate and modify aerosol drug therapy.
45. State the information patients need to know to self-administer drug aerosol therapy properly.
46. Describe how to assess patient response to bronchodilator therapy at the point of care.
47. Describe how to apply aerosol therapy in special circumstances.
48. Describe how to protect patients and caregivers from exposure to aerosolized drugs.

3 Unit III Content: Pharmacology

1. Principles of Pharmacology
2. Adrenergic Bronchodilators
3. Anticholinergic Bronchodilators
4. Mucus-Controlling Agents
5. Inhaled Corticosteroids
6. Nonsteroidal Antiasthma Drugs
7. Aerosolized Anti-infective Agents
8. Inhaled Pulmonary Vasodilators

Unit Outcomes/Objectives

1. Analyze three phases that constitute the course of drug action from dose to effect.
2. Describe classes of drugs that are delivered via the aerosol route.

3. Compare mode of action, indications, and adverse effects that characterize each major class of aerosolized class of drug.
4. Compare available aerosol formulations, brand names, and dosage for each specific drug class.
5. Select the appropriate drug class for a specific patient or clinical situation.
6. Assess the outcomes for each class of aerosol drug therapy.

4 Unit IV Content: Medical Ethics

1. Philosophical Foundations of Ethics
2. Ethical Dilemmas of Practice
3. Codes of Ethics
4. Ethical Theories and Principles
5. Ethical Viewpoints and Decision Making
6. Legal Issues Affecting Respiratory Care
7. Interaction of Ethics and Law
8. Professional Licensure Issues
9. Respiratory Therapist Who Speak Out About Wrongdoing
10. Healthcare and Change
11. Mandated Reporters
12. How to Report Maltreatment

Unit Outcomes/Objectives

1. Summarize the philosophical foundations of ethics.
2. Explain what constitutes an ethical dilemma and how such dilemmas arise in health care.
3. Describe how professional codes are of ethics apply to ethical decision making.
4. Explain how traditional ethical principles are useful in resolving ethical dilemmas.
5. Describe the information that should be gathered before making an ethical decision.
6. Explain how the systems of civil and criminal law differ.
7. Describe what constitutes professional malpractice and negligence.
8. Explain how a respiratory therapist can become liable for wrongful acts.
9. List the elements that constitute a practice act.
10. Explain how licensing effects legal responsibility and liability.
11. Identify who qualifies as a mandated reporter.
12. Describe when and who to report maltreatment problems.

2. Which CLOs were addressed for this academic year? (2019-2020)

All CLOs are addressed each year as they are imperative to competence of students performing patient care.

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3. Which CLOs are being addressed in your assessment plan next academic year? (2020-2021)

All CLOs are addressed each year in the assessment plan. All CLOs are assessed with written exams and live student evaluations of competencies prior to performance on patients.

4. Explain the assessment cycle.

Didactic evaluations are with paper/pencil tests and all laboratory competencies are evaluated one-on-one with students in the laboratory prior to performance of competency in patient care. Students are required to perform a second competency evaluation with preceptors at the bedside prior to autonomy with patients in care delivery.

5. What are the assessment methods? Are they direct or indirect?

All assessment methods are direct and require satisfactory performance on both written assessments and clinical competencies demonstrated in all laboratory experiences.

6. What are the assessment goal(s)?

To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).

7. What were the findings for this academic year? (2019-2020)

100% of 2020 graduates were both clinically and didactically successful and obtained employment in local hospitals.

8. What is your analysis of the findings?

All didactic and clinical training is sufficient to meet CoARC standards for respiratory care practice.

9. What is the action plan for the next academic year? (2020-2021) Explain.

1. To continue to present didactic, laboratory, and clinical materials and rotations currently utilized for students to ensure successful completion of the program.
2. Currently added tutoring on Fridays to assure retention of students in the program.
3. Recently added 3 hospitals and 1 DME to clinical rotations for student to ensure variety of clinical experiences is obtained by respiratory students.