RESP-2940: RESPIRATORY CARE FIELD EXPERIENCE I

Cuyahoga Community College

Viewing: RESP-2940 : Respiratory Care Field Experience I

Board of Trustees: May 2020

Academic Term:

Fall 2020

Subject Code RESP - Respiratory Care

Course Number:

2940

Title:

Respiratory Care Field Experience I

Catalog Description:

Field experience in the clinical setting on respiratory care equipment, policies, and procedures. Emphasis on patient assessment, bedside pulmonary function testing, aerosol therapy, arterial blood gas punctures and oxygen therapy.

Credit Hour(s):

1

Other Hour(s):

240

Other Hour Details:

24 hours field experience per week for 10 weeks (240 hours total)

Requisites

Prerequisite and Corequisite

RESP-1320 Acid-Base and Hemodynamics, and RESP-1330 Cardiopulmonary Assessment and Pulmonary Diseases, and RESP-1340 Pharmacology for Respiratory Care.

Outcomes

Course Outcome(s):

Assess a patient utilizing patient records, patient interview, examination of the chest, radiologic exams, laboratory data, and vital signs to determine patient's pathophysiologic state.

Objective(s):

- 1. Measure, document, and interpret bedside pulmonary function parameters utilizing appropriate equipment.
- 2. Interpret vital sign data and relate to patient's pathophysiologic state.
- 3. Interpret examination of the chest data and relate to patient's pathophysiologic state in written and verbal format.

Course Outcome(s):

Safely collect an arterial blood gas (ABG) puncture sample from a patient, analyze and interpret the sample results.

Objective(s):

- 1. Perform bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for ABG according to the clinical practice guidelines.
- 2. Interpret and evaluate a physician's order for ABG; identifying goals, indications, contraindications, and hazards of procedure.
- 3. Interpret ABG and relate to possible cause of any abnormal results.
- 4. Calibrate, monitor, and record quality control procedures for blood gas analyzers and/or co-oximeters.
- 5. Trouble-shoot equipment.

Course Outcome(s):

Administer aerosol therapy with prescribed medication and instruct the patient in the proper breathing technique.

Objective(s):

- 1. Perform bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for aerosol therapy according to the clinical practice guidelines.
- 2. Interpret and evaluate a physician's order for aerosol therapy; identifying goals, indications, contraindications, and hazards of therapy.
- 3. Administer aerosol therapy and chart appropriate data in patient medical record.
- 4. Evaluate delivered therapy and recommend, and if appropriate institute changes in respiratory care modalities according to the individual patient.
- 5. Calculate doses of medications delivered via small volume nebulizers.
- 6. Categorize pharmacological agents delivered via aerosol therapy and state the indications, contraindications, possible adverse events, onset of action, and recommended dosage for pharmacological agents used to treat pulmonary disorders.
- 7. Trouble-shoot equipment.

Course Outcome(s):

Communicate with patients and health care personnel verbally, written, and via electronic medical record (EMR) within Health Insurance Portability & Accountability Act (HIPAA) standards.

Objective(s):

- 1. Compose a patient summary to deliver to medical team and/or shift report.
- 2. Develop a plan to prioritize and manage a respiratory care workload as determined by the clinical instructor.
- 3. Demonstrate/modify the delivery of patient care to accommodate patients with special needs.
- 4. Follow clinical site information systems and department protocols for access/sign-on to the electronic medical record (EMR) and to navigate through the EMR.
- 5. Chart (electronic medical record (EMR) and/or paper charting) all procedures, treatments, therapies, and flowsheets per clinical site protocols.
- 6. Adhere to the Health Insurance Portability & Accountability Act (HIPAA) standards.

Course Outcome(s):

Apply "Standard Precautions" protocols when administering therapies as recommended by the Centers for Disease Control and institutional guidelines in the care of all patients.

Objective(s):

- 1. Apply Centers for Disease Control recommendations for specific pandemic infection control policies and protocols.
- 2. Adhere to all infection control clinical site protocols.

Course Outcome(s):

Compose a college-level written and oral small group presentations using correct grammar, appropriate rhetorical strategies, reference citation and style format.

Essential Learning Outcome Mapping:

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

Objective(s):

- 1. Present an overview or description of the pathophysiologic condition for problem based learning activity.
- 2. Discuss and evaluate patient management including recommendations to respiratory care plan for problem based learning activity.
- 3. Compose a PowerPoint presentation of the case study for presentation to classmates, clinical instructors, and program staff for problem based learning activity.
- 4. Formulate responses to questions related to Journal Club article and present in small group format, both oral and written.

Course Outcome(s):

Evaluate a patient's oxygenation status to determine the method of oxygen therapy delivery and monitor the patient's response to therapy.

Objective(s):

- 1. Perform bedside tests, laboratory studies, and/or chart review, to adequately assess a patient's condition, correctly interpret the results obtained, and analyze results to determine indications for supplemental oxygen therapy according to the clinical practice guidelines.
- 2. Calculate oxygen requirements to determine the optimal oxygen delivery system.
- 3. Interpret and evaluate a physician's order for oxygen therapy; identifying goals, indications, contraindications, and hazards of therapy.
- 4. Administer oxygen therapy to patient and chart appropriate data in patient medical record.
- 5. Recommend, and if appropriate, institute changes in respiratory care modalities according to the individual patient.

Methods of Evaluation:

- 1. Proficiency evaluations
- 2. Summative clinical evaluation
- 3. Clinical quizzes
- 4. Small group projects (journal club and case study) presentations
- 5. Clinical simulations

Course Content Outline:

- 1. Clinical orientation activities:
 - a. Departmental orientation
 - i. department management and organization
 - ii. department policy and procedure manuals
 - iii. student meeting area
 - iv. parking facilities
 - v. equipment/supply storage
 - vi. ID badge
 - b. Hospital orientation
 - i. patient care area
 - ii. ancillary departments
 - iii. cafeteria
 - iv. department related equipment/supplies
 - v. infection control policies/protocols
 - vi. HIPAA policies
 - c. Clinical orientation
 - i. patient charts and documentation
 - ii. equipments
 - iii. Clinical proficiencies
- 2. Clinical profieciencies
 - a. Patient assessment
 - b. Oxygen therapy
 - c. Aerosol therapy
 - d. Arterial blood gas puncture
- 3. Clinical activities
 - a. Chart review and documentation
 - b. Use of equipment/supplies related to administration of therapies
 - c. Emergency codes
 - d. Administration of ordered therapy: concentration on, but not limited patient assessment, oxygen therapy, aerosol therapy, ABG puncture
 - e. Assessment of patients and development of therapeutic care plan
 - f. Communication with health care team
 - g. Physician rounds/conferences
 - h. Small group journal club presentation
 - i. Problem based learning- patient case presentation

Resources

West JD. (2012) Respiratory Physiology: The Essentials, Baltimore:Lippincot Williams&Wilkins.

West JD. (2001) Pulmonary Physiology & Pathophysiology, Baltimore:. Lippincot Williams&Wilkins.

Oakes D & Jones S. (2017) Clinical Practioner's Pocket Guide to Respiratory Care, Maine: Health Educator Publications.

DesJardins T& Burton GG. (2020) Case Studies T/A Clinical Manifestations and Assessment of Respiratory Disease, St. Louis, MO: Elsevier .

Wilkins S, Stoller J, Scanlan C. (2020) Egan's Fundamentals of Respiratory Therapy, St. Louis, MO: Elsevier .

Hever L & Scanlon CL. (2018) Wilkin's Clinical Assessment in Respiratory Care, St. Louis, MO: Elsevier .

Colbert BJ, Gonzalez III LS, Kennedy BJ. (2019) Integrated Cardiopulmonary Pharmacology, BVTPublishers.

Cairo JM. (2018) Mosby's Respiratory Care Equipment, St Louis, MO: Elsevier .

Gardenhiere DS. (2019) Rau's Respiratory Care Pharmacology, St. Louis, MO: Elsevier.

Will Beechey. (2018) Respiratroy Care Smatomy and Physioology, St. Louis: Elsevier.

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