

Module Report

Tutorial: Real Life RN Nursing Care of Children 4.0

Module: Cystic Fibrosis Community Care



Individual Name: Jessica Runde

Institution: Lakeview CON

Program Type: BSN

Standard Use Time and Score

	Date/Time	Time Use	Score
Cystic Fibrosis Community Care	9/20/2024 12:56:45 PM	14 min	Strong

Reasoning Scenario Details

Cystic Fibrosis Community Care - Use on 9/20/2024 12:42:30 PM

Reasoning Scenario Performance Related to Outcomes:

*See Score Explanation and Interpretation below for additional details.

Body Function	Strong	Satisfactory	Needs Improvement
Cardiac Output and Tissue Perfusion	100%		
Cognition and Sensation	100%		
Excretion	100%		
Ingestion, Digestion, Absorption & Elimination	100%		
Mobility	100%		
Oxygenation	100%		

NCLEX RN	Strong	Satisfactory	Needs Improvement
Health Promotion and Maintenance RN 2013	100%		
RN Management of Care	100%		
RN Health Promotion and Maintenance	100%		
RN Psychosocial Integrity	100%		
RN Pharmacological and Parenteral Therapies	100%		

RN Reduction of Risk Potential	100%		
RN Physiological Adaptation	100%		

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		
Patient-Centered Care	100%		
Evidence Based Practice	100%		
Quality Improvement	100%		

Decision Log:

Optimal Decision	
Scenario	Nurse Molly is planning care for Courtney's admission to home health services.
Question	Nurse Molly is planning care for Courtney's admission to home health services. Identify the sequence of actions Molly should take. (Reorder the steps by dragging them into the desired sequence.)
Selected Ordering	Contact the family by phone. Clarify the purpose of the referral.Allow the family to clarify needs.Schedule the visit as soon as possible.Verify the time and place of the visit.
Rationale	Initiating contact with families for home health services involves many steps that are best completed in an appropriate order: contact the family by phone, clarify the purpose of the referral, allow the family to clarify needs, schedule the visit as soon as possible, and then verify time and place of the visit.

Optimal Decision	
Scenario	Nurse Molly auscultates Courtney's heart sounds.
Question	Nurse Molly is auscultating Courtney's heart sounds. Identify the sequence of locations Molly should assess when auscultating heart sounds. (Reorder the steps by dragging them into the desired sequence.)
Selected Ordering	AorticPulmonicErb's pointTricuspidMitral
Rationale	Auscultate the heart over the anatomic valve sites and areas in a systematic order: aortic, pulmonic, Erb's point, tricuspid, and mitral.

Optimal Decision	
Scenario	Nurse Molly identifies Courtney's lung sounds.
Question	Nurse Molly identifies Courtney's lung sounds. Which of the following sounds did Molly hear?
Selected Option	Coarse crackles
Rationale	Coarse crackles are produced by the passage of air through moisture. A crackling sound is heard on inspiration and varies in pitch.

Optimal Decision	
Scenario	Nurse Molly is planning care with Courtney's family about the next home visit.
Question	Nurse Molly is planning care with Courtney's family about the next home visit. Which of the following is the priority teaching action?
Selected Option	Provide an overview of cystic fibrosis.
Rationale	When educating clients and family, the nurse begins with basic information and then adds content that is more specific. Providing an overview of cystic fibrosis is the priority action.

Optimal Decision	
Scenario	Nurse Molly is explaining the pathophysiology of cystic fibrosis to Courtney and her parents.
Question	Nurse Molly is explaining the pathophysiology of cystic fibrosis to Courtney and her parents. Which of the following is an appropriate explanation?
Selected Option	"Children with cystic fibrosis have an increased sodium and chloride content of their sweat."
Rationale	The pancreas excretes low levels of bicarbonate and chloride with a resultant increase in sodium and chloride content of sweat and saliva.

Optimal Decision	
Scenario	Nurse Mark is calculating the dosage of azithromycin to administer to Courtney.
Question	Nurse Mark is reviewing Courtney's prescription for azithromycin. Based on Courtney's weight, determine the correct dose of medication to be administered. (Round the answer to the nearest whole number.)
Selected Option	160

Rationale	Follow these steps for the Ratio and Proportion method of calculation: Step 1: What is the unit of measurement the nurse should calculate? mg Step 2: Set up an equation and solve for X. $X = \text{Dose per kg} \times \text{Client's weight in kg}$ $X \text{ mg} = 5 \text{ mg} \times 32 \text{ kg}$ $X \text{ mg} = 160 \text{ mg/day}$ Step 3: Round if necessary. Step 4: Determine whether the amount to administer makes sense. If the prescribed amount is 5 mg/kg/day and the client weighs 32 kg, it makes sense to administer 160 mg/day. The nurse should administer azithromycin 160 mg. Follow these steps for the Desired Over Have method of calculation: Step 1: What is the unit of measurement the nurse should calculate? mg Step 2: Set up an equation and solve for X. $X = \text{Dose per kg} \times \text{Client's weight in kg}$ $X \text{ mg} = 5 \text{ mg} \times 32 \text{ kg}$ $X \text{ mg} = 160 \text{ mg/day}$ Step 3: Round if necessary. Step 4: Determine whether the amount to administer makes sense. If the prescribed amount is 5 mg/kg/day and the client weighs 32 kg, it makes sense to administer 160 mg/day. The nurse should administer azithromycin 160 mg. Follow these steps for the Dimensional Analysis method of calculation: Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.) $X \text{ mg} =$ Step 2: Determine the ratio that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.) $5 \text{ mg} X \text{ mg} = 160 \text{ kg}$ Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement. $5 \text{ mg} 32 \text{ kg} 1 \text{ day} X \text{ mL/dose} = 160 \times 160 \times 160 \text{ kg} 1 \text{ day} 1$ Step 4: Solve for X. $X \text{ mg} = 160 \text{ mg/day}$ Step 5: Round if necessary. Step 6: Determine whether the amount to administer makes sense. If the prescribed amount is 5 mg/kg/day and the client weighs 32 kg, it makes sense to administer 160 mg/day. The nurse should administer azithromycin 160 mg.
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Optimal Decision	
Scenario	School Nurse Mark called Nurse Molly about Courtney's mucus clearance device.
Question	School Nurse Mark called Nurse Molly about Courtney's mucus clearance device. Which of the following is an appropriate statement by Molly?
Selected Option	"It is a small handheld device with a ball inside that facilitates removal of mucus."
Rationale	The mucus clearance device is a small handheld device with a ball inside that facilitates removal of mucus. It is a type of chest physiotherapy.

Optimal Decision

Scenario	Nurse Molly is explaining how to administer pancrelipase (Creon).
Question	Nurse Molly explains how to administer pancrelipase (Creon). Which of the following is an appropriate statement?
Selected Option	"You can open the capsule and sprinkle the contents over applesauce."
Rationale	The contents of the Creon capsule can be sprinkled on applesauce for administration to children having difficulty swallowing.

Optimal Decision	
Scenario	Nurse Molly is teaching Courtney's parents about her dietary needs.
Question	Nurse Molly is teaching Courtney's parents about her dietary needs. Which of the following statements should Molly include in the teaching?
Selected Option	"Courtney should eat 150% of the recommended daily food requirements for her age and size."
Rationale	Children who have cystic fibrosis expend more energy because of breathing efforts and pancreatic insufficiencies, so they need a high-protein, high-calorie diet for growth and metabolism.

Optimal Decision	
Scenario	Nurse Molly is teaching about Courtney's respiratory medications.
Question	Nurse Molly is teaching about Courtney's respiratory medications. Which of the following is an appropriate response? (Select all that apply.)
Selected Ordering	Levalbuterol (Xopenex) is a bronchodilator. Dornase alfa (Pulmozyme) decreases the viscosity of mucus. Levalbuterol (Xopenex) should be administered first. Dornase alfa (Pulmozyme) has many adverse effects.
Rationale	The action of levalbuterol (Xopenex) is to dilate the bronchi. It should be administered first to open the airways to promote mucus expectoration. It also can increase blood glucose levels. The action of dornase alfa (Pulmozyme) is to decrease the viscosity of mucus. It is a mucolytic, not a corticosteroid, and has many adverse effects.

Optimal Decision	
Scenario	Nurse Molly is teaching percussion, vibration, and postural drainage therapy to Courtney's parents.
Question	Nurse Molly is teaching percussion, vibration, and postural drainage therapy to Courtney's parents. Which of the following should be included in the teaching?
Selected Option	"Each percussion, vibration, and postural drainage therapy session is about 45 minutes long."
Rationale	Each position is usually assumed for 10 to 15 minutes.

Optimal Decision	
Scenario	Nurse Molly is reviewing physical activity with Courtney, her parents, and Coach Hogan.

Question	Nurse Molly is reviewing physical activity with Courtney, her parents, and Coach Hogan. Which of the following is appropriate to include in the teaching?
Selected Option	"Courtney should choose the activities she enjoys as much as her pulmonary health will allow."
Rationale	Physical exercise promotes excretion of mucus so any activity that a child enjoys should be encouraged as much as pulmonary health will allow.

Optimal Decision	
Scenario	Nurse Molly is reviewing normal growth and development.
Question	Nurse Molly is reviewing normal growth and development with Courtney and her parents. Which of the following is characteristic of children in Erikson's Stage of Industry? (Select all that apply.)
Selected Ordering	Cooperating and displaying the element of order among groupsRespecting parental control
Rationale	Characteristics of children in Erikson's Stage of Industry include the elements of cooperation and order among groups and respect for parental control. Characteristics of preschool children include associative play with others. Characteristics of adolescence include exploring ways to attract the opposite sex and using personal friendships to confirm identity.

Optimal Decision	
Scenario	Nurse Molly is teaching Courtney's mother about health concerns related to cystic fibrosis.
Question	Nurse Molly is teaching Courtney's mother about health concerns related to cystic fibrosis. Which of the following should be included in the teaching?
Selected Option	"Children who have cystic fibrosis are at greater risk for osteoporosis."
Rationale	Children who have cystic fibrosis have an increased risk for development of osteoporosis because of pancreatic insufficiency and steroid use.

Optimal Decision	
Scenario	Nurse Molly is responding to Courtney's desire to eliminate respiratory therapy.
Question	Nurse Molly is responding to Courtney's desire to eliminate respiratory therapy. Which of the following is an appropriate response?
Selected Option	"It is important that you adhere to the medical regimen to promote optimal health."
Rationale	Chest physiotherapy and respiratory treatments remain the best practices in managing optimal health in clients who have cystic fibrosis.

Individual Report – Score Explanation and Interpretation

Reasoning Scenario Information:

Reasoning Scenario Information provides the date, time and duration of use, along with the score earned for each attempt. A Reasoning Scenario Performance score of Strong, Satisfactory, or Needs Improvement is provided for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

Reasoning Scenario Performance Scores:

Strong	Exhibits optimal reasoning that results in positive outcomes in the care of clients and resolution of problems.
Satisfactory	Exhibits reasoning that results in mildly helpful or neutral outcomes in the care of clients and resolution of problems.
Needs Improvement	Exhibits reasoning that results in harmful or detrimental outcomes in the care of clients and resolution of problems.

Reasoning Scenario Performance Related to Outcomes:

A clinical reasoning performance score related to each outcome is provided. Outcomes associated with student responses are listed in the report. The number across from each outcome indicates the percentage of responses associated with the level of performance of that outcome.

NCLEX® Client Need Categories:

Management of Care	Providing integrated, cost-effective care to clients by coordinating, supervising, and/or collaborating with members of the multi-disciplinary health care team.
Safety and Infection Control	Incorporating preventative safety measures in the provision of client care that provides for the health and well-being of clients, significant others, and members of the health care team.
Health Promotion and Maintenance	Providing and directing nursing care that encourages prevention and early detection of illness, as well as the promotion of health.
Psychosocial Integrity	Promoting mental, emotional, and social well-being of clients and significant others through the provision of nursing care.
Basic Care and Comfort	Promoting comfort while helping clients perform activities of daily living.
Pharmacological and Parenteral Therapies	Providing and directing administration of medication, including parenteral therapy.
Reduction of Risk Potential	Providing nursing care that decreases the risk of clients developing health-related complications.

Physiological Adaptation	Providing and directing nursing care for clients experiencing physical illness.
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Quality and Safety Education for Nurses (QSEN)

Safety	The minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others.
Patient-Centered Care	The provision of caring and compassionate, culturally sensitive care that is based on a client's physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values
Evidence Based Practice	The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based.
Informatics	The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice.
Quality Improvement	Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients.
Teamwork and Collaboration	The delivery of client care in partnership with multidisciplinary members of the health care team, to achieve continuity of care and positive client outcomes.

Body Function

Cardiac Output and Tissue Perfusion	The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues.
Cognition and Sensation	The anatomical structures (brain, central and peripheral nervous systems, eyes and ears) and body functions that support perception, interpretation, and response to internal and external stimuli.
Excretion	The anatomical structures (kidney, ureters, and bladder) and body functions that support filtration and excretion of liquid wastes, regulate fluid and electrolyte and acid-base balance.
Immunity	The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth.
Ingestion, Digestion, Absorption and Elimination	The anatomical structures (mouth, esophagus, stomach, gall bladder, liver, small and large bowel, and rectum) and body functions that support ingestion, digestion, and absorption of food and elimination of solid wastes from the body.
Integument	The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury.
Mobility	The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement.

Oxygenation	The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide.
Regulation and Metabolism	The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment.
Reproduction	The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions.

Decision Log

Information related to each question answered in a scenario attempt is listed in the report. A brief description of the scenario, question, selected option and rationale for that option are provided for each question answered. The words "Optimal Decision" appear next to the question when the most optimal option was selected.

The rationale for each selected option may be used to guide remediation. A variety of learning resources may be used in the review process, including related ATI Review Modules.