

ATI Real Life Student Packet  
N201 Nursing Care of Special Populations  
2025

Student Name: Alex Brzozowski

ATI Scenario: Cystic Fibrosis

**To Be Completed Before the Simulation**

\*Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation\*

Medical Diagnosis: Cystic Fibrosis

**NCLEX IV (8): Physiological Integrity/Physiological Adaptation**

Anatomy and Physiology

Normal Structures

Respiratory tract divided into upper and lower tract. The upper tract includes the nasopharynx, pharynx and larynx along with the sinuses. The lower respiratory tract includes the trachea, bronchi, bronchioles, lungs and alveoli. The epiglottis keeps gastric contents in the GI tract to prevent them from entering the respiratory tract. The respiratory system exchanges oxygen and carbon dioxide through inhalation and exhalation. As children get older, they learn to breathe through their mouth when unable to breathe through their nose. They have a more circular chest wall because ribs are in line with the vertebral structures. They have weak intercostal muscles which lead to fast respiratory fatigue. Pharynx is shorter in diameter and length. Trachea is short, narrow, and less supported by surrounding structures-this causes an increased risk for aspiration. Increased metabolic demand in young infants, causing an increase in their need for oxygen, which has a higher risk for hypoxia.

**NCLEX IV (7): Reduction of Risk**

Pathophysiology of Disease

Cystic Fibrosis develops because there is an anomaly in the protein that is responsible for making mucus in organs such as the liver, pancreas, lungs, intestines, and sweat glands. Mucus in a person who has CF is very thick. This thick mucous can lead to blockages, growth of organisms and impaired function. It can lead to infection, irritating lung tissue which can lead to scarring and impaired gas exchange. The mucus also affects the pancreas, which impairs the release of some digestive enzymes that affect food digestion, absorption of nutrients, and diabetes. In a child with cystic fibrosis you will see a chronic lack of oxygenation and respiratory involvement which will have clubbed fingers/toes, barrel shaped chest, wheezing due to lung congestion, nasal congestion and sinus infections.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Ineffective Airway Clearance

Goal 1: Will have improved breath sounds by the end of my time of care.

<p><b>Relevant Assessments</b></p> <p>(Prewrite) What assessments pertain to your patient’s problem? Include timeframes</p>	<p><b>Multidisciplinary Team Intervention</b></p> <p>(Prewrite) What will you do if your assessment is abnormal?</p>
<p>Assess lung sounds Q2hrs</p>	<p>Perform chest physiotherapy to help excrete secretions</p>
<p>Assess RR and effort Q2hrs</p>	<p>Position in a semi or high fowlers position</p>
<p>Assess sputum color and consistency Q2hrs</p>	<p>Encourage fluids to help thin secretions</p>
<p>Assess for signs of cyanosis or nasal flaring Q2hrs</p>	<p>Provide supplemental oxygen as needed</p>
<p>Assess ability to cough and clear secretions Q2hrs</p>	<p>Assist with coughing techniques and provide fluids</p>
<p>Assess temperature Q2hrs</p>	<p>Administer antipyretics/antibiotics as ordered by provider from S/Sx of infection</p>

Goal 2: Will have clear sputum with minimal thickness by the end of my time of care.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Impaired Nutrition

Goal 1: Will show minimal signs of fatigue during feedings during my time of care.

<b>Relevant Assessments</b>	<b>Multidisciplinary Team Intervention</b>
(Prewrite) What assessments pertain to your patient’s problem? Include timeframes	(Prewrite) What will you do if your assessment is abnormal?
Assess weight daily	Provide high calorie, high protein, diet, notify provider with noticeable weight loss
Assess for signs of fatigue or poor appetite at mealtime	Allow for rest periods before meals and after meals, limit distractions during mealtimes
Assess for signs of respiratory distress during or after meals	Stop the feeding, notify the provider, position upright during meals
Assess dietary intake at mealtime	Keep a food diary, offer foods more enjoyable, include dietitian to make recommendations
Assess for S/Sx of abdominal distension, tenderness at meals	Encourage slow eating, upright position during and after mealtime, notify provider if these symptoms continue
Assess energy level Q2hrs	Offering high calorie snacks, report to provider worsening signs in energy level

Goal 2: Will eat 75% of meals offered during my time of care,

**To Be Completed During the Simulation:**

**Actual Patient Problem #1: Ineffective Airway Clearance**

Goal: Will have improved breath sounds such as less wheezing by the end of my time of care Met:  Unmet:

Goal: Will have clear sputum with minimal thickness by the end of my time of care. Met:  Unmet:

**Actual Patient Problem #2: Impaired Nutrition**

Goal: Will show increased interest in meals during my time of care. Met:  Unmet:

Goal: Will ensure a proper diet for cystic fibrosis such as high protein, high calories during my time of care. Met:  Unmet:

Additional Patient Problems:

**#3: Infection**

**#4:**

#5

#6

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings. **Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments? **Reassessment/Evaluation:** What was your patient’s response to the intervention?

Patient Problem (#)	Time	Relevant Assessments	Time	Multidisciplinary Team Intervention	Time	Reassessment/Evaluation
Infection	0900	Positive for Burkholderia Cepacia, WBC-19,000, Neutrophils 76%, Lymphocytes-24%	0905	Placed on contact precautions	0915	Nurse explained the purpose of contact precautions, such as wearing gloves every time someone comes into the room, not being able to go to the game room
Ineffective Airway Clearance/Infection	0930	Lung sounds: wheezing on posterior and anterior lungs	0940	Nurse called the respiratory therapist to see when his treatments are due	0950	Nurse reviews order to give IV tobramycin-plans to prepare to give it
Infection/ Ineffective Airway Clearance	1000	WBC-19000, positive for Burkholderia Cepacia, wheezing present in all lobes of lungs, T-37.9, RR-26, O2-95% on RA	1010	Administered IV tobramycin 90mg, questioning order of Zosyn due to his allergy, planning to administer Gentamicin	1030	Gentamicin 130mg IV bolus is now infusing, doctor ordered an enteral feeding bolus, s
Impaired Nutrition	1030	Doctor prescribed an enteral nutrition feeding-bolus	1045	Nurse is going to administer enteral feeding bolus through gastrostomy tube	1050	Mother states Gary hasn’t been eating well and needs the extra calories
Ineffective Airway Clearance	1045	Order for physiotherapy, states having green sputum when he gave a sputum sample	1050	Respiratory therapist arrived stating it was time to complete the physiotherapy	1055	Respiratory therapist states he has a lot of mucus plugs but feel the treatment helped, did not hear as much wheezing, he skips a lot of his treatments at home
Impaired Nutrition	1100	States wanting “real food”	1115	Nurse orders him fried chicken, pork and beans, corn on the cob, chocolate whole milk, and a candy bar	1200	Nurse brings in food to room, stating she will also be administering Pancreaze 3 capsules PO

**To Be Completed After the Simulation**

\*The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations\*

**NCLEX IV (7): Reduction of Risk**

**Actual Labs/ Diagnostics**  
 WBC-19  
 Neutrophils-76%  
 Lymphocytes-24%  
 Chest X-ray: shows stable hilar shadowing and bilateral bronchial thickening, resolution of right lower lobe opacity, right peripherally inserted catheter is present with the end in the superior vena cava  
 Findings on chest x-ray: consistent with chronic inflammatory lung disease, right lower lobe pneumonia

**NCLEX II (3): Health Promotion and Maintenance**

**Signs and Symptoms**  
 Persistent cough-no sputum present  
 Wheezing to posterior and anterior lungs  
 Not eating a lot  
 Fever

**NCLEX II (3): Health Promotion and Maintenance**

**Contributing Risk Factors**  
 Not wanting to do at home therapy for the cystic fibrosis  
 Carrier parents-both parents are carriers of the CFTR gene  
 Family History

**NCLEX IV (7): Reduction of Risk**

**Therapeutic Procedures**  
Non-surgical  
 Physiotherapy  
 Medications  
  
Surgical  
 Central Line placement

**Prevention of Complications**  
 (Any complications associated with the client's disease process? If not, what are some complications you anticipate)  
  
 He developed Burkholderia Cepacia infection- due to not being compliant with at home therapy

**NCLEX IV (6): Pharmacological and Therapies**

**Medication Management**  
 Pulmozyme 2.5mg nebulizer twice daily  
 Budesonide 2 inhalations daily  
 Albuterol 0.83% unit dose nebulizer 4x/day  
 Tobramycin 90mg IV bolus every 8 hours  
 Gentamicin 130mg IV bolus  
 Pancreaze 3 capsules PO with a snack/supplement

**NCLEX IV (5): Basic Care and Comfort**

**Non-Pharmacologic Care Measures**  
 Chest Physiotherapy 4x daily  
 Keeping him in an upright position, not laying flat in the bed  
 Up as tolerated-stationary bicycle for 30min 2x daily  
 High calorie, high protein with 3 snacks daily

**NCLEX III (4): Psychosocial/Holistic Parenteral Care Needs**

**Stressors the client experienced?**  
 Anxiety  
 Not being able to go to the game room due to being on contact precautions  
 Worrying due to being in the room feeling trapped, worried that he is going to feel bored

**Client/Family Education**

**Document 3 teaching topics specific for this client.**  
 • Educating the importance to continue regimen for treatments even when at home  
 • Importance to be getting proper nutrition/caloric intake with cystic fibrosis  
 • Importance to complete full course of antibiotic to help get rid of infection

**NCLEX I (1): Safe and Effective Care Environment**

**Multidisciplinary Team Involvement**  
 (Which other disciplines were involved in caring for this client?)  
 Nurses  
 Provider  
 Respiratory Therapy

**Patient Resources**

Support groups with other children with cystic fibrosis  
 Getting in touch with the cystic fibrosis foundation-they help with things like finances and different benefits

**Reflection Questions**

Directions: Write reflection including the following:

**1. What was your biggest “take away” from participating in the care of this client?**

My biggest take away from being part of this simulation is to not always believe for think that someone is doing someone just because you tell them to do it. For example, this is a child, who is not really compliant. It is important to make sure to really tell him the benefits of why he is doing the nebulizer treatments, along with telling the family so they can help push him to be compliant and be a resource to go to if he doesn't understand the treatment. When dealing with children I have learned you are not only educating the child, you are also educating the parents.

**2. What was something that surprised you in the care of this patient?**

Something that surprised me during this care for a child is how often they get medication as well as how many other health conditions can go along with just having cystic fibrosis. I have personally never had experience with this condition so seeing all the different respiratory medications and therapies that are used is truly interesting. This really gave me a better understanding if in the future I am dealing with a child with this disorder or really any respiratory disorder. Understanding how crucial it is to get all multidisciplinary teams involved like respiratory therapy.

**3. What is something you would do differently with the care of this client?**

I think something I would have done differently in this simulation would be educating more respiratory activities instead of just giving meds and physiotherapy. I think I would have gone into more detail about using the incentive spirometer, along with the importance of coughing to help bring up some of the mucus. I think I would have also really emphasized the importance of staying hydrated and drinking plenty of water to help clear some of the secretions.

**4. How will this simulation experience impact your nursing practice?**

This simulation impacted my nursing career because it really shows how in pediatrics a lot of the care is family centered. When a child is sick, they may not be comprehending all of the information properly or have the education capacity so making sure you are involving the family so they know how to do different treatments, when they should be getting the treatments and different meds involved is very important. It is important the whole entire family knows what is going on and I think that is something I will carry over to my nursing career!

**5. Discuss norms or deviations of growth and development that was experienced during the simulation, including developmental stage.**

In this simulation some norms of growth and development that I saw is that this child is able to hold a conversation using full complete sentences, he understands right from wrong meaning he knew that he was not doing his treatments at home and that was wrong and one of the reasons he developed an infection and ended up back in the hospital. His developmental stage is Identity vs role confusion this was shown by when he got upset that he could not go to the game room and hang out with other people, when he found out he was confined to his room it made him feel like he did not have a sense of independence. He is also in the formal operations stage, he was able to logically think and understand consequences such as if he did not do his treatments he could end up back at the hospital.