Chronic Condition Self-management: Pediatric Asthma: Student Guide

Please be sure to complete the online evaluation after your simulation session!

The **purpose** of this simulation is for students to apply the nursing process in providing nursing care and education for a child experiencing acute asthma. The focus of the scenario is on both acute management and self-management/family management at home to prevent future exacerbations.

Learning Objectives

By the end of this simulation-based experience, the learner will be able to…

1. Complete a focused assessment of a child presenting with asthma exacerbation, prioritizing safety and immediate needs, but also attending to patient/family knowledge and ongoing care needs.
2. Integrate varied sources of information, including an organizational care pathway, into planning of immediate and ongoing care for a pediatric patient with asthma.
3. Implement an educational approach that incorporates principles of family-centered care, as well as addressing the parent and child's present knowledge and readiness to learn.
4. Evaluate the effectiveness of family teaching to identify further teaching needs.
5. Describe the roles of varied ambulatory care team members in coordinating the care of a child with a chronic health condition.

Expectations

Learners are expected to arrive having (1) fully reviewed this student guide, (2) completed the assigned readings and videos, and (3) completed the application questions. All students are expected to have the first 2 pages of the Seattle Children's Hospital Asthma Pathway ready to use (if assigned the nurse role) or follow along (if an observer). Students are also expected to have the Observer Form to complete should they be assigned that role.

The clinical scenario will be an unscheduled family clinic visit with a 9 year old boy experiencing an asthma exacerbation, and his accompanying parent. You'll initially assess the patient and talk to the parent to make a nursing judgment on the urgency of care, using the Seattle Children's asthma pathway. After your assessment, you'll give SBAR report to the provider. We'll take a quick pause in which we assume the provider sees the patient, then will give orders. Finally, you'll carry out the provider's orders and provide teaching to the patient and child.

The briefing, scenario, and debriefing will take about 90 minutes.

Topics

- Asthma
- Care pathway
- Pediatric care
- Family-centered care
- SBAR communication
- Medication administration (oral and inhaled)
- Patient teaching

Preparation (Readings and Videos)

For this simulation, you will need to be generally familiar with treating an acute asthma exacerbation and managing chronic asthma. The preparation materials are listed below, along with how you should focus as you review these materials

Asthma assessment & treatment

- *Asthma.* (March 24, 2022). National Heart, Lung, and Blood Institute. Retrieved from https://www.nhlbi.nih.gov/health-topics/asthma. This website is oriented toward educating patients, but it provides an excellent overview of asthma, including treatments. As you review the website, think about how you would also use this information in teaching a parent and child. Make sure you clearly understand the purpose of short term and controller medications (under "Treatment").
- Seattle Children's Hospital Asthma Pathway. Read pages 1, 2, and 6 ("Criteria and Respiratory Score", "ED Management", and "Respiratory Scoring Tool"). You will apply this pathway during the scenario for planning acute care management. It is optional to skim the remainder.

Patient Education Materials – In addition to reviewing the NHLBI Website linked above, review the materials listed below to be prepared to provide patient education.

- *How to use your inhaler correctly.* (March 7, 2018). Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/asthma/inhaler_video/default.htm. You only need to review the first video, *Using a Metered Dose Inhaler with a Spacer.*
- *Asthma FAST facts for kids.* (n.d.). Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/asthma/pdfs/kids_fast_facts.pdf. Review this sheet to strategize how you would provide teaching to a child.
- *Asthma action plan.* (April, 2007). National Heart, Lung, and Blood Institute. Retrieved from https://www.nhlbi.nih.gov/sites/default/files/publications/07-5251.pdf. Review this guide for an understanding of chronic asthma management. Page 1 focuses on medication, and Page 2 focuses on environmental triggers.

Pre-simulation Reflection Questions

1. What are some strategies you could use to build rapport and enhance **communication** with a 9-year-old patient? How would you balance your attention to the parent versus the patient?

You will apply the **nursing process** to all telehealth encounters. The questions below will prepare you for an organized approach to the patient care scenario.

2. What **assessment** data would you want to collect regarding the parent's primary concern about the patient? What would you want to know immediately for treatment of the child versus information for chronic management?
3. When **implementing** the nursing intervention, what are your top priorities? What are your longer term priorities?
4. How would you approach **teaching** the parent and child? What strategies would you use? How would you engage them as active partners in their care?
5. How would you **evaluate** the outcomes of the nursing intervention during this patient encounter?
6. What **follow-up care** would be appropriate for chronic care management?
7. What would you want to **document** after the visit?
8. Complete a brief **Medication Administration Record** (MAR) on the following drugs so you are ready to work with these in the simulation.

Medication *Name, Dose; Frequency; Schedule, Route*	**Drug Class/ Mechanism Of Action**	**Medications Purpose for this Patient**	**Nursing Considerations (adverse effects, contraindications, monitoring**
Albuterol MDI (90 mcg/puff), 2 puffs every 4-6 hours as needed for symptoms			
Fluticasone MDI (110 mcg/puff), 1 puff twice daily			
Dexamethasone solution (0.5mg/5 mL), 2.6 mL by mouth, give 24 hours after first dose			

Observer Form

Learners who are not active participants in the scenario are expected to complete an Observer Form. Observers' insights offer key learning opportunities during debriefing. Have this form ready to fill out during the scenario.

Chronic Condition Self-management: Pediatric Asthma: Student Observer Form

Instructions: This Student Observer Form is to help you apply critical thinking as you watch the simulation and to prepare you to actively participate in the debriefing. As you observe, complete the checklist based on are the simulation learning objectives and take notes on the debriefing questions.

Performance	Notes (What went well? What could have gone differently?)
☐ Learning Objective 1: Complete a focused assessment of a child presenting with asthma exacerbation, prioritizing safety and immediate needs, but also attending to patient/family knowledge and ongoing care needs.	
☐ Learning Objective 2: Integrate varied sources of information, including an organizational care pathway, into planning of immediate and ongoing care for a pediatric patient with asthma.	
☐ Learning Objective 3: Implement an educational approach that incorporates principles of family-centered care, as well as addressing the patient and child's present knowledge and readiness to learn.	
☐ Learning Objective 4: Evaluate the effectiveness of family teaching to identify further teaching needs.	
☐ Learning Objective 5: Describe the roles of varied ambulatory care team members in coordinating the care of a child with a chronic health condition.	