

Asthma Review

Learning Objectives:

- ▶ Identify signs and symptoms of Asthma Exacerbation
- ▶ Provide care for pediatric patients diagnosed with Asthma
- ▶ Identify resources available to support nursing care
- ▶ Identify resources available to teach patient and family/caregiver
- ▶ Develop awareness and understand team roles involved in patient care

3 year old Claire arrived to the Emergency Department with difficulty breathing. Claire is stabilized and is admitted to your unit with a diagnosis of Asthma Exacerbation.

Let's Review PRAM Scoring...

1. What is a PRAM score?

The Pediatric Respiratory Assessment Measure

A 12-pt clinical scoring rubric that captures a patient's asthma severity using a combination of:

- Scalene muscle contraction
- Suprasternal retractions
- Wheezing
- Air entry
- Oxygen saturations

PRAM is a validated scoring tool to classify severity of exacerbations and its response to treatment in children with Asthma.

2. Where can you find the PRAM score guidelines?

On SHOP (PRAM Score Assessment reference tool and PRAM Nursing Documentation form)

Also, www.childasthmatools.umontreal.ca

3. When do we do a PRAM score?

With vital signs, as ordered. Typically q2-4 hourly for asthma admissions. Pre-salbutamol and 10 minutes post-salbutamol.

BONUS: For patients on hi-flow oxygen → q4h

You notice that nurses are using the puffer at Claire's bedside.

4. How do you know if there is Ventolin left in the puffer before you use it?

There should be a label on the puffer for nurses to track doses given or it is found in the eMAR listed as a comment.

Before administering Ventolin, you note that Claire continues to have difficulty breathing despite treatment. You auscultate expiratory wheezes and decreased air entry to the RLL and LLL, and observe suprasternal indrawing. Scalene retractions are not palpable. Her vitals are: HR 168, RR 54, temp 37.6 ax, BP 105/68, and O2 sats 94% on room air.

5. What PRAM score would you give Claire?

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1 pt→sats 92-94%, 2 pts→suprasternal retractions, 1 pt→ decreased a/e to bases in two fields, 1 pt→expiratory wheezes only in two fields

As a nurse, one of your responsibilities is to initiate the Pediatric Asthma: Education and Discharge Checklist.

6. When do you do this and where can you find the checklist?

As soon as possible, ideally on admission. You can find it on SHOP – should be kept in the patient's Chartlet.

7. Where can you find resources to support asthma teaching with patients and families?

SHOP→Action Plans, Discharge Checklist
Family Resource Library
Telus Optik Patient & Family Education Portal (asthma video, multi-lingual)
Child Health BC
Asthma Clinic Nurse

8. Mom states she would like to give the Ventolin puffer. How would you proceed?

Yes! Encourage Mom. Ensure Mom has watched the Asthma education video first, review technique/demonstration, then have Mom return-demo with feedback. Write a schedule on the whiteboard and ask Mom to call nurse before next dose (pre-assessment and observation).

Claire has met all the criteria for discharge.

9. What are the criteria for discharge?
- Patient is on home salbutamol dosing or 2-4 puffs q4h
 - PRAM score is 0-3

PNO Medicine Workshop

- SpO2 >92% x12 hours (including a period while asleep)
- Discharge Plan is completed
- Home inhaled corticosteroids are prescribed

10. What are your actions in the discharge process for a child with asthma?

- Wean O2 and assess to ensure 12 hours of sats >92% on room air
- Ensure discharge plan is complete
- Review discharge teaching with family
- Ensure prescriptions have been given
- Involve SW and other allied health team members as needed

11. Does Claire need a referral to the Asthma Clinic?

Claire may need a referral if she has had recurrent ED visits with documented wheeze (>2 visits), if there is diagnostic uncertainty or if her family requires additional education.

12. What is an Asthma Action Plan? How many different Action Plans are available and which one should Claire and her family receive?

A resource to guide asthma discharge teaching and a 'road map' for patients and families for management of asthma at home and knowing when to see a doctor or return to the hospital.

There are two different age categories for the plan (1-5 years and 6-18 years and they are available in English, Chinese and Punjabi. Claire and her family should receive an Action Plan for Children 1-5 years old in her family's primary language.