QUALITY STANDARD SUMMARY FOR

# Asthma in Children and Adolescents

This document is a resource for health care providers and caregivers and synthesizes content from the ***Asthma Care in the Community for People Under 16 Years of Age* quality standard**.

Quality Standards

## Confirming a Diagnosis of Asthma in Children and Adolescents

### Quality Statement (QS)* 1: Diagnosis

Asthma is clinically suspected in the presence of signs or symptoms of variable airflow obstruction and in the absence of an alternative diagnosis. To **confirm a diagnosis of asthma in children 1 to 5 years of age** who are unable to undergo spirometry and for whom you have no clinical suspicion of another diagnosis, observe and document:

- Their **signs or symptoms of airflow obstruction** (i.e., shortness of breath, chest tightness, wheezing, or cough)
- **Reversibility of symptoms with asthma medications** during two or more episodes of worsening symptoms

**To confirm a diagnosis of asthma, administer or order spirometry for children and adolescents 6 year of age and older** who are clinically suspected of having asthma. If spirometry is inconclusive, consider the need for additional lung function testing such as methacholine challenge testing.

Ideally, complete the testing **within 3 months** of the person seeking care. Review the results with patient and their caregivers.

*The quality statements are provided in full on page 2.

## Asthma Management

### QS 2: Asthma Control

Asthma control parameters for children and adolescents include **measures of symptoms and lung function**. Perform a structured assessment to determine the person's level of asthma symptom control and any reasons for poor control before modifying medication (see QS 3), if needed.

Assess asthma symptom control over 4 weeks **at least annually**. Ensure spirometry and other lung function testing are done, as needed. ***Let patients know that they can expect to live symptom free when asthma is controlled.***

### QS 3: Asthma Medication

Offer all children and adolescents with asthma:

**(1) medication based on their age and current level of asthma control and**

**(2) the most appropriate inhaler devices and spacer device to meet their needs and developmental level.**

Initiate a low-dose inhaled corticosteroid (ICS) as a regular controller medication for children and adolescents 1 to 16 years of age with asthma who experience asthma symptoms two or more times per week or meet other criteria for uncontrolled asthma. For children 12 years of age and older, ICS-formoterol, to be taken as needed, may be prescribed as an alternative. Escalate medication only after addressing other reasons for poor control (see QS 2).

### QS 4: Self-Management Education and Asthma Action Plan

Provide asthma self-management education to children and adolescents with asthma and their caregivers. Work with them to create a written personalized asthma action plan that is regularly reviewed and considers literacy, usability, and language.

Ensure that they receive information about and referrals to local service providers who can help them learn how to avoid or reduce exposure to triggers and improve their ability to self-manage (e.g., referral to asthma education, team-based care, or social services).

## Referral to Specialized Pediatric Asthma Care and Follow-Up After Discharge

### QS 5: Referral to Specialized Pediatric Asthma Care

For children and adolescents with asthma **who have appropriate indications** (see QS 5 in the quality standard)**, consult with or refer them to specialized pediatric asthma care.** The specialized care provider should communicate the recommended plan for treatment and follow-up (if needed) to the primary care provider.

### QS 6: Follow-Up After Discharge

If a child or adolescent who has had an asthma exacerbation ends up in an emergency department, prior to discharge the care team should tell their caregiver to **arrange a follow-up primary care appointment.** If the person is hospitalized, the hospital care team should arrange for a follow-up assessment in primary care. In either setting, the discharging care team should send the person's discharge information directly to the primary care provider.

Following discharge, **consider referring** the child or adolescent to an asthma education program or specialized asthma care.

# Asthma in Children and Adolescents

## Quality Statements

### Quality Statement 1: Diagnosis

Children 6 years of age and older and adolescents clinically suspected of having asthma complete spirometry to demonstrate reversible airflow obstruction and, if negative, other lung function testing to confirm the diagnosis of asthma, as soon as possible. Children 1 to 5 years of age are diagnosed with asthma after documentation of signs or symptoms of airflow obstruction, reversibility of symptoms with asthma medications, and no clinical suspicion of an alternative diagnosis.

### Quality Statement 2: Asthma Control

Children and adolescents with asthma have a structured assessment at least annually to determine their level of asthma control and reasons for poor control.

### Quality Statement 3: Asthma Medication

Children and adolescents with asthma receive appropriate medication and devices based on their age and current level of asthma control, including early initiation of regular inhaled anti-inflammatory therapy.

### Quality Statement 4: Self-Management Education and Asthma Action Plan

Children and adolescents with asthma and their caregivers receive self-management education and a written personalized asthma action plan that is reviewed regularly with a health care professional.

### Quality Statement 5: Referral to Specialized Pediatric Asthma Care

Children and adolescents with asthma with appropriate indications are referred to specialized pediatric asthma care.

### Quality Statement 6: Follow-Up After Discharge

Children and adolescents who have had an emergency department visit or been hospitalized for an asthma exacerbation have a follow-up assessment within 2 to 7 days after discharge.

Note: This resource can be used to support health care providers in the provision of care. It does not override the responsibility of health care providers to make decisions with patients, after considering each patient's unique circumstances. Grouping/directionality of statements may not be applicable for every patient, and clinical judgment should be used.

## Resources for Parents, Caregivers, and Health Care Providers

- Your Child's Asthma—Patient Guide https://www.hqontario.ca/Portals/0/documents/evidence/quality-standards/qs-asthma-in-children-and-adolescents-patient-guide-en.pdf
- Quick Reference Guide to Understand Asthma https://lunghealth.ca/new-resources-to-help-you-understand-asthma/
- Asthma Action Plan (Pediatric) http://hcp.lunghealth.ca/wp-content/uploads/2020/02/lhf_pediatricaap_en_web_fillable.pdf
- Asthma Pals Mentorship Program https://asthma.ca/asthma-pals-mentorship-program/
- Childhood Asthma Resources and Support https://www.cheo.on.ca/en/resources-and-support/asthma.aspx
- AsthmaLife https://www.asthmalife.ca/
- Asthma helplines: Asthma Canada: 866-787-4050; Lung Health Foundation: 1-888-344-LUNG (5864)
- Spirometry Interpretation Guide https://hcp.lunghealth.ca/wp-content/uploads/2020/02/Spirometry-Interpretation-Guide.pdf
- Spirometry: A Clinical Primer https://machealth.ca/programs/spirometry-interpretation/
- Archived OTN Webinars https://hcp.lunghealth.ca/workshops/archived-otns/
- Dr. Dhenuka Radhakrishnan: How do we manage childhood asthma? Introducing the Ontario Health Asthma Quality Standards for children and adolescents https://www.youtube.com/watch?v=Lu2QD5yFVDQ

Additional tools and resources are on Quorum https://quorum.hqontario.ca/en/Home/Posts/Asthma-Care-in-the-Community-Quality-Standards-Tools-for-Implementation

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