



Guelph Family
Health Team

**Implementation of the Asthma Action Plan
to Improve Asthma Control, QOL and
Reduce Hospital Visits**

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System Leadership

Organizational Capacity

System Navigation

Sustainability

Purpose

Today's goals

1. To share the GFHT's team experience with implementation of Asthma Action Plan
2. Discuss:
 - reason why Asthma population was prioritized
 - implementation Process
 - outcomes to date
 - improvement opportunities

Purpose

Program

- To enhance use of BPG to screen, diagnose and manage asthmatic patients at the Guelph FHT
- To provide patient education and support
- To encourage patient self-management

Background

Guelph Family Health Team (GFHT)

Members

- 72 Family Physicians
- 85 AHP
- 100,000 pts
 - (Est. Asthma prevalence at GFHT 11.5% = 11,500 patients)

Pilot practice for Asthma Action Plan

- 6 physicians
- 5 AHP
- 7557 patients

Background

Primary Care Nurse Clinician (PCNC)

Role:

- Chronic disease management, prevention and health promotion
- Identify at risk patient population
- Provide education, support and systems navigation to access resources

Goal:

- To Improve
 - health and wellness
 - patient access and self-management

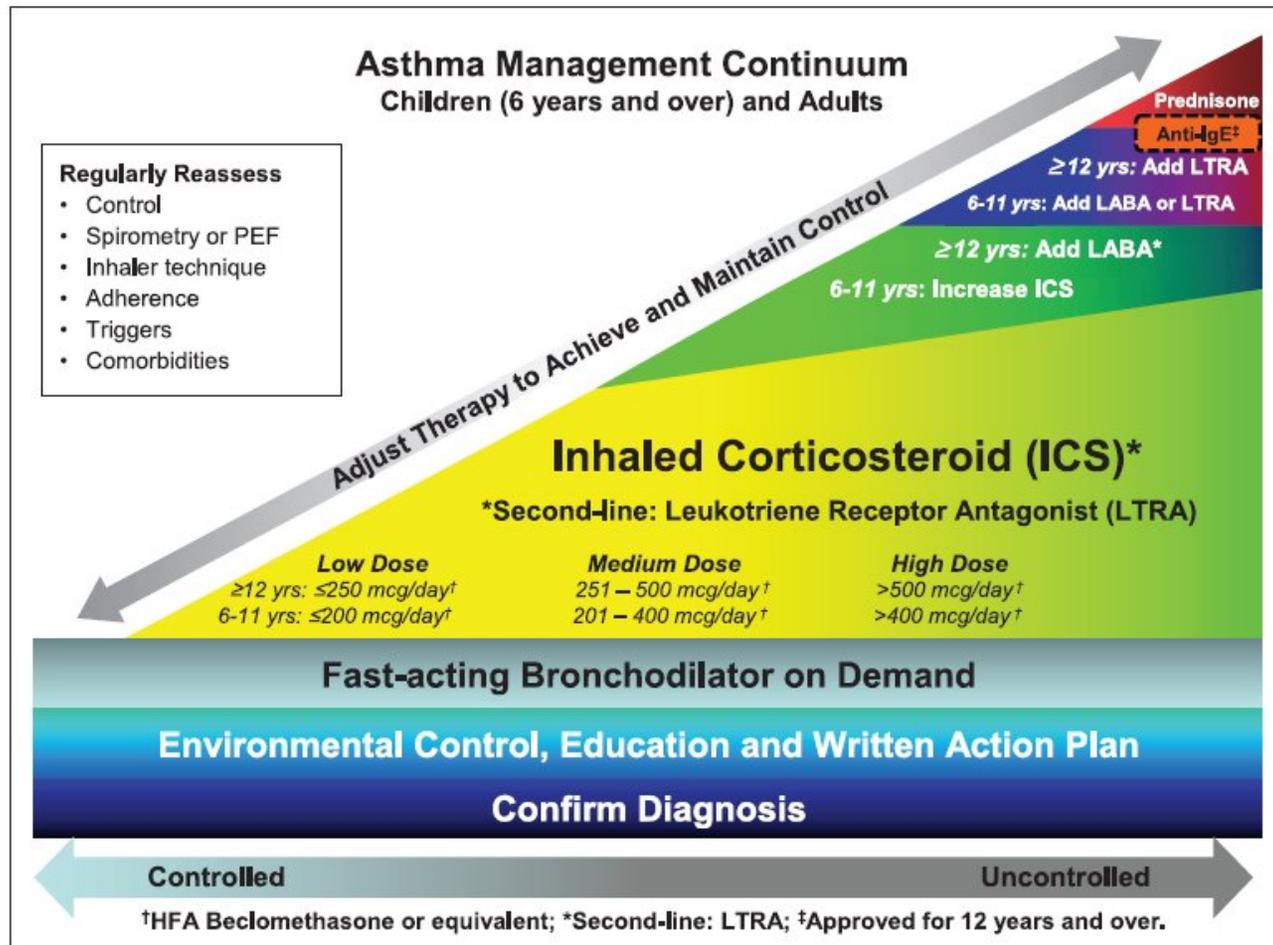
Background

Why Asthma?

- 10% of the population in Ontario affected by CD including Asthma and COPD.
- Patients with asthma and COPD experience a loss of productivity, increased health care utilization and a decreased quality of life
 - 15% of children in Ontario are affected by asthma
 - 8% of adults
 - 10% of admissions to hospital for children with asthma
- Patients who have asthma must assume responsibility as active participants in the management of their chronic disease.
- Most asthma can be well controlled with proper diagnosis, treatment, education and follow-up

Background

Why Asthma?



Background

Patient Knowledge Deficit regarding asthma:

- Physiology
- Medication pharmacology, adherence and technique
- Control based on symptoms
- Adjustment of medication based on symptom control
- When to seek medical attention

Process

Patient Identification

Criteria and EHR search terms

- ≥ 6 years old
- Diagnosis
 - “Asthma”
 - “Airway Resistance”
 - “Reactive Airway”

Process

Patient Recruitment

- PCNC
 - Calls pts directly to discuss initiative and book appt
 - Leave message for pt to call office book appt
- Admin Staff support:
 - Book asthma appt with PCNC for pts calling office

Process

Patient Education

Asthma education topics covered in everyday terminology:

- Trigger identification
- Physiology
- Pharmacological treatments and mechanisms of action
- Medication use and adherence
- Prevention of lung infection
- Warning signs of exacerbation
- Proper inhalation technique, including use of valved holding chamber when appropriate

Process

Asthma Action Plan

Best practice guide to inform consistent:

- Symptom categorization
 - Daytime Symptoms
 - Nighttime Symptoms
 - Use of Reliever
 - Physical Activity
 - Able to go to school or work
- Clinical targets review and tracking:
 - Green (controlled), yellow (uncontrolled) or red (out of control)
 - When to seek medical attention
 - Medication adjustment based on control
 - Trigger identification and avoidance
 - Goals to encourage patient self-management

Process

Patient Teaching Tool

Action plan of: _____
Date: _____

Personal goals: _____

Possible Triggers
(circle)

 smoke
 colds
 animals
 pollens
 mold
 dust
 strong smells
 weather changes
 strong emotions

Other _____

Exercise _____

Asthma under control?

Yes
Normal life, regular activities

No

No
Cough, wheeze, short of breath, tight chest, colds, allergies

Not at all

Not at all
Very short of breath, trouble speaking, blue/grey lips / fingernails

1. Daytime symptoms	3 times or less/week	More than 3 times/week	Continuous & worsening
2. Nighttime symptoms	None	Some nights	Continuous & worsening
3. Reliever	3 times or less/week	More than 3 times/week	Relief less than 3-4 hours
4. Physical activity	Normal	Limited	Very limited
5. Able to go to school or work	Yes	Maybe	No
6. Peak expiratory flow Best value (optional): _____	85 to 100 % to _____	60 to 85 % to _____	Less than 60 % Less than _____
What to do:	Stay controlled & avoid triggers 	Adjust 	Call for help
Preventer/Controller: Use DAILY to control airway swelling & other symptoms. Rinse mouth after each use.	1 _____ (name / strength) _____ (color) Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	1 _____ (name / strength) _____ (color) Take _____ (amount) <input type="checkbox"/> AM <input type="checkbox"/> PM	EMERGENCY 911 Take all asthma medications at the highest dose recommended by your doctor until help arrives. (This may include prednisone)
Reliever/Rescue: Quickly relieves symptoms by relaxing muscles around airways.	1 _____ (name / strength) _____ (color) Take _____ (if at peak) as needed Before exercise? <input type="checkbox"/> Yes <input type="checkbox"/> No	1 _____ (name / strength) _____ (color) Take _____ (if at peak) as needed If no improvement in _____ days, call your doctor.	
Clinician: _____ Health Link Alberta: _____			

Adapted from the Local Hospital Asthma Plan, Ottawa, ON, 2007
Rev 2007

Outcomes

Clinical data

- # patients placed on action plan N=122
 - Controlled, not controlled, and out of control numbers can be analyzed.
- Practice Improvement
 - Tracking searchable data
 - Valved chamber use with pressurized metered dose inhaler
 - Proper Inhaler technique
 - Medication Adherence

Outcomes

Clinical data

- ER use

ER visits for all asthma patients	
January –June 2011	January -June2012
227	264

- Limitations

- ER visit data of asthmatic patients to consistently identify and document reason for visit
- Ability to account for seasonal or annual trigger variation; such as the Air Quality Index or Pollutant Concentrations.

Outcomes

Patient specific

- Improved Quality of Life
 - Recorded by follow up phone calls to patients
- Improved patient understanding of
 - classification of asthma symptoms
 - increased patient ability to self adjust medication dose based on symptoms and action plan
 - need to seek medical attention promptly if necessary

Outcomes

Clinic Specific

- Early referrals by Physician to PCNC for
 - Screening and assessment with spirometry to facilitate new dx)
 - Patients experiencing new or worsening SOB or uncontrolled asthma symptoms
- Improved access
 - Free physician schedule for episodic care

Outcomes

Clinic Specific

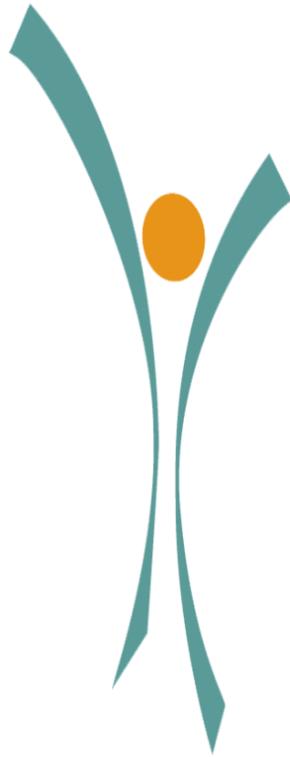
- Implemented medical directives to facilitate PCNC F/U:
 - with asthmatic pts. throughout calendar year to ensure effective management → adequate control
 - (i.e medication adjustment within parameters especially with seasonal changes)
 - post-discharged asthma ER/hospital visits

Improvement Opportunities

- Need for integrated and standardized approach to asthma outcomes data capture and tracking across health care continuum to support comparability

References

- Canadian Thoracic Society
http://www.lung.ca/cts-sct/home-accueil_e.php
- RNAO Best Practice Guidelines
<http://rnao.ca/bpg/guidelines>
- COPD and Asthma Network of Alberta
<http://www.canahome.org/>



Guelph Family Health Team

THANK YOU

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